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A CLINICAL LECTURE.

Delivered at the Philadelphia Hospital.

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The Mutual Relations in Cardiac and Renal Disease.

Gentlemen: In connection with a series of cases which we have in the wards at the present time, and which I hope to show you during the coming month, I thought that it would be well to call attention to the relations between the kidney and the heart, in disease. In order to make the matter more systematic I shall in the first place indicate the association of these affections. All forms of organic disease of the heart may be included in the following classification:

Hypertrophy,
Dilatation,
Fatty Degeneration,
Myocarditis, } Acute and
Endocarditis. } Chronic.

Simple or idiopathic hypertrophy of the heart, independent of renal disease, has no influence upon the kidney. Far different is it in dilatation, where, as you know, there is loss of muscular power of the organ, and as a consequence stagnation of blood. The central power is insufficient to force the blood throughout the circuit, and as a result the blood stagnates in the various organs and dependent tissues of the body. One of the first organs to become the seat of passive congestion is the kidney. The expression of the renal trouble in cardiac dilatation may be either acute or chronic, simple passive congestion, or so-called cyanotic induration. The clinical phenomena of congestion of the kidney are the passage of urine in small amount containing either a large or small quantity of albumin, usually a moderate amount, a large quantity of uric acid and urates, the specific gravity being as a rule about normal, or in consequence of the presence of the uric acid and urates, increased to 1028 or 1030. There may be casts, usually of the hyaline variety, and sometimes, when the congestion is acute, there may be blood casts.

In valvular disease of the heart, acute and chronic, we sometimes have emboli, causing hemorrhagic infarcts in the kidney. It is not necessary that the endocarditis be confined to the valves of the heart. The occurrence of hemorrhagic infarcts is rarely indicated by any symptoms whatever, or only by the presence of blood in the urine. It is said that sometimes when they are very large, severe pain in the back is present. The only grounds for the suspicion of the presence of hemorrhagic infarcts in the kidney is the presence of endocarditis and the occurrence of hemorrhagic infarcts in other portions of the body, as the skin, the mucous membranes and the eye-ground. The usual symptoms in myocarditis and fatty heart are dependent upon the presence or absence of dilatation, and are due to that condition of the muscle. On the other hand, in renal disease, and I refer only to the inflammatory affections of the kidney, the heart is soon the seat of anatomical changes. In acute Bright's disease, in the "large white kidney," and in interstitial nephritis, hypertrophy ensues. Dilatation may or may not follow. Sclerotic inflammation of the aortic leaflets may arise in persistent cases. Myocarditis will occur if a chronic endoartertis, including the coronary arteries in the process, develops with the interstitial inflammation of the kidney. But these associated lesions will be referred to again.

Let us now turn to this patient. Her history is briefly as follows: She is 35 years of age, inherits no marked tendency to any form of disease, but has had rheumatism in early adult life, and since then at intervals. She is married and has had six children. This is an important point to bear in mind. During the period of pregnancy, and during the birth of all her children, there was nothing abnormal. Her hygienic surroundings have been poor, and that may be one of the causes of her frequent attacks of rheumatism. During the past five years she has had some dyspnea, particularly on exertion, and a sense of not being able to get enough air. She has been under the care of a physician outside, for an attack of pleurisy. Otherwise she has been perfectly well. She has never had dropsy, except during the period of gestation. She has had no venous congestion in any portion of the body prior to the present illness, with the exception of hemorrhoids, which are not necessarily dependent upon cardiac trouble.

Three months ago this patient was admitted to the maternity wards of the hospital, where she was delivered five weeks ago. The labor was not difficult and there were no serious symptoms whatsoever. Prior to labor she complained of considerable dyspnea, and it was then found that she had valvular disease of the heart. There is sometimes found during pregnancy, a functional murmur, but here the character of the murmur was different from that of a functional murmur. This, with the marked dyspnea and the increase in the area of cardiac dulness showed that there was organic disease of the heart. This is generally considered to be rather a serious complication of pregnancy by those who take charge of this branch, and Dr. Hirst took this woman under his own particular care. Dr. Angus McDonald has reported in the *Edinburgh Medical Journal* a number of these cases, which presented serious symptoms, and many of which resulted fatally during labor. You can readily understand that where there is organic disease of the heart, the changes in the circulation by the straining during labor and the severe pain, may produce most serious congestions. Certainly, an acute dilatation of the heart may arise. It has happened to me to deliver four or five pregnant women, the subjects of cardiac disease. In three cases there was marked organic disease. In three there were alarming symptoms, but in all, recovery took place. Two, which presented alarming symptoms of syncope, were cases of aortic disease with mitral regurgitation, the other was a case of mitral regurgitation alone, and was characterized by pronounced venous stasis, the same as is seen in heart disease when the patients go to a high altitude.

This patient did not have a difficult labor and no marked symptoms during the lying-in with the exception of a moderate amount of fever. After her recovery she was transferred to the women's medical ward, on account of this condition of the heart and the presence of albuminuria. There was a large quantity of albumin. With heat and nitric acid it was found that it formed one-fourth of the bulk of the urine in the tube. In addition, the urine was of medium specific gravity, alkaline in reaction, and contained a number of hyaline casts. The question to determine was whether we had a primary renal disease with secondary heart affection, whether we had heart disease with secondary involvment of the kidney, or whether we had the two as independent affections.

The history of the case clearly shows that there was no albuminuria prior to the labor. There was no old Bright's disease nor even the albuminuria which often accompanies pregnancy. The patient was subjected to thorough examination and there is no reference to albuminuria, and we may therefore take it for granted that this condition has arisen since confinement. The question then arises, is the albuminuria due to acute Bright's disease, or is it simply albuminuria, secondary to the dilatation of the heart? As you know, hypertrophy of the heart naturally occurs during pregnancy, and with this there may be dilatation. During labor the severe straining is liable to cause acute dilatation. Such dilatation would be sufficient to explain the albuminuria that is here present. We at once eliminate acute Bright's disease, for the urine does not present the color nor the large amount of albumin that is characteristic of that affection. There has not been the renal dropsy which attends this affection, associated as it frequently is with vomiting and pain in the loins. From a consideration of these phenomena we concluded that in all probability the condition was one of acute dilatation, independent of the state of the valves and that it took place during labor. Furthermore, we exclude Bright's disease in all forms on account of the absence of the essential phenomena of this disease. The sphygmographic tracing does not indicate high arterial tension. The up stroke is normal, there is no flattening of the apex, but an immediate fall. Some dicrotism is present, but not more than is seen in ordinary dilatation of the heart. The examination of the eye ground is another factor in the elimination of Bright's disease. The ophthalmoscopic examination has been made by Dr. de Schweinitz, and nothing has been found to indicate the presence of renal disease.

There are one or two circumstances in this evolution of the case which are worthy of further consideration. When admitted to the medical ward the evening temperature was 102° F. and since then it has ranged from 99° in the morning to 101° in the evening, usually not rising higher than 100°. This has continued for one week. On examining the heart, in addition to the increased area of cardiac dulness, the displacement of the apex beat and the signs of dilatation, we found present at the base, but heard loudest at the apex, transmitted with unusual force into the axilla and heard very loud in the back at the angle of the scapula, a murmur which was at once recognized as due to mitral regurgitation. The murmur is loud, but of low pitch, and soft, and therefore not a murmur indicative of an old valvular lesion or a sclerotic endocarditis, but rather of a recent process. In all probability if we had not the history of pregnancy with elevated temperature during her lying-in and subsequently, we might not have laid much stress on the condition of the heart, but have thought that the murmur was an old one or the result of undue dilatation. The attendance of fever, however, demands further consideration of the nature of the cardiac lesion.

Is the murmur heard here due to the causes just mentioned alone, or is it due to some recent endocarditis of septic origin and liable to follow confinement? There has been no history of any pelvic inflammation or of any peritoneal inflammation. There has been nothing to indicate local inflammatory trouble in this region, and I think that the cardiac murmur is not due to recent endocarditis, but is the result of the dilatation. This, however, does not explain the fever. There is going on in the base of the lungs another interesting process, occurring without cough, without any increase in the dyspnea that has attended the cardiac trouble. The physical signs show that at the right base there is a considerable quantity of pleural effusion and at the left base the signs of catarrhal pneumonia, a lesion which frequently attends cardiac disease. Catarrhal pneumonia may occur in these cases from two causes: first, the local stasis of blood, and, second, as the result of a pulmonary hemorrhagic infarct. There has been no spitting of blood, no complaint of active dyspnea, and no fall of temperature, none of the phenomena which indicate pulmonary hemorrhagic infarct.

The condition of the liver tends to corroborate our opinion in regard to the state of the kidney. There is some pain in the hepatic region and the liver is enlarged, and, as is usually the case, the portion found in the epigastrium is most distinctly enlarged. In the nipple line the edge of the liver is three or four inches below the costal border, and in the epigastrium the lower limit of hepatic dulness is almost at the umbilicus.

I therefore consider that in this case we have had acute dilatation of the heart succeeding pregnancy, and causing congestion of the kidneys and of the liver, and also leading to pleural effusion in the right cavity and catarrhal pneumonia of the left lung. As a result of the renal congestion, there is albuminuria. We thus have an example of a renal affection following heart disease.

I shall now call your attention to the next patient, in whom, as regards his heart, there is practically the same condition that we found in the previous case, namely, dilatation; and in all probability this dilatation is the primary condition, and the renal disease that is present, the secondary one. It is very difficult and sometimes impossible, except in private practice, where the patient may be under observation for a long period of time, to determine the exact relation of the two conditions—that is, whether the renal disease is primary and the cardiac lesion secondary; or, on the other hand, whether the cardiac disease is primary and the renal by involvement secondary. This is a case of long continued heart disease without renal symptoms, in which the renal symptoms now present are indicative of a marked degree of organic disease and not merely simple congestion. The associated phenomena lead us to infer that we have first had valvular disease of the heart, and that secondarily, as a result of the long continued congestion of the kidneys, there have occurred nutritive changes leading to interstitial and desquamative nephritis. The patient was admitted on account of anasarca and pleural effusion. There was also great dyspnea amounting, indeed, to orthopnea. The use of cardiac tonics have given her great relief. The pleural effusion has subsided and the dropsy has largely disappeared. The urine at the earlier examinations contained only a moderate quantity of albumin, at no time so great as in the previous case. The amount of albumin remains the same, although the results of congestion of other organs have disappeared. This is another point in favor of organic disease of the kidneys. The pulse tracing is shown on this card and indicates the presence of high arterial tension. It is true that there is possibly aortic valve disease, for there is a murmurish sound in the aortic region, and there may be general atheroma, but there is everything to warrant us in considering that the high arterial tension, as shown by the short up stroke and the broad top of the sphygmographic tracing, is due to the presence of renal disease complicating, or secondary, to the cardiac affection. I prefer to consider the renal disease as secondary, because the cardiac affection is of long standing, and the renal disease has apparently not progressed much. Moreover, we have not found any casts in the urine. These signs would point more especially to the presence of cirrhotic kidney in which form, casts are often absent. The small amount of albumin, the absence of casts and the high arterial tension indicate the presence of renal disease. As I have stated this is in all probability secondary to the cardiac disease, but this could be determined positively only by the full history, which unfortunately we have been unable to obtain.

In connection with this subject, I shall ask your attention to one or two morbid specimens. The first is an example of cardiac hypertrophy, pure and simple, which has occurred secondarily to one of the renal diseases that I have mentioned. Remember that this occurs in all of these affections. Mahomed and others have found cardiac hypertrophy within four weeks after the occurrence of acute Bright's disease. Hypertrophy of the heart occurs in three forms: either simple hypertrophy, hypertrophy with contraction, or hypertrophy with dilatation. Simple hypertrophy is rare. The existence of hypertrophy with contraction of the cavity is doubted by many observers. Hypertrophy with dilatation is the form almost always met with. You observe the enormous thickness of the wall of this left ventricle. The heart weighs eighteen ounces and was removed from a man 56 years of age, who was admitted with uremia and died four or five weeks later from the same condition. He had chronic contracted kidneys, an interstitial nephritis. The renal cortex had almost entirely disappeared, the capsule was removed with difficulty and the surface was studded with cysts. Of course one reason that the heart has preserved such excellent nutrition is on account of the good condition of the coronary arteries.

This heart represents hypertrophy with dilatation. There has been primarily valvular disease, as shown by the thickening along the edges of the mitral leaflets, by the contraction of the chordæ tendinæ, and by the comparative narrowness of the mitral outlet. There is no doubt that this man had, first, mitral obstruction and mitral regurgitation. With a cavity as large as this, the mitral orifice should admit four or five fingers readily; instead of that, but two can be introduced with ease. As a result of this dilatation the man had congestion of all the organs. There was anasarca, enlargement of the liver, albuminuria of moderate amount, with some hyaline casts and large pleural effusion. The pleural effusion was relieved, but the hypostatic congestion of the lungs continued and death took place from cardiac failure. There was no uremia. The pulse did not indicate the existence of old renal disease, and undoubtedly the albuminuria was the result of the venous stasis alone.

The two cardiac muscles illustrate the condition usually seen in cases of renal disease. Dilatation does often occur after hypertrophy has existed for some time, and its presence or absence is usually due to the condition of the coronary arteries. In some cases it is simply part and parcel of the process which is indicative of the failure of nutrition. You well know that in Bright's disease the cause of the hypertrophy of the heart is not alone the obstruction in the renal circulation, which of itself would not be sufficient to account for it, but also the obstruction in the general peripheral circulation. This hypertrophy is a compensatory process entirely, but there comes a time when the heart muscle will fail in its hypertrophy. This may be brought about by a number of causes. Some derangement of health or some acute attack may serve as the cause of the beginning of dilatation. When the heart begins to fail all of the blood is not forced out at each contraction. The amount retained gradually increases and this leads to dilatation from internal pressure and is undoubtedly a frequent cause of dilatation of the heart. We could not conceive of any other way in which this enormous dilatation could have been brought about.

I shall again call your attention to this case and to other cases illustrating cardiac hypertrophy and dilatation, and from these we can progress to other matters in connection with this subject.

BERIBERI.

By F. B. SUTLIFF, M. D., Sacramento, Cal.

Read before the Sacramento Society for Medical Improvement.

Authorities do not agree as to the meaning of the term "beriberi," and they differ as to how it came to be introduced as the name of a disease. and by whom Good, in his "Study of Medicine," says that Bontius seems first to have introduced the term into medical nomenclature, and speaks of its Oriental origin. Mr. J. Ridley[1] says that it was introduced by the Malabar physicians. The point is, however, of but little importance to us. In whatever language the term is used we are told that it implies tillage of the soil, and its products, grain, and pasturage, and in turn the products of grain and pasturage, cattle or sheep. The term is applied to the disease because of the fancied resemblance of the tottering gait of the patient to that of a tired or sick sheep.

All the authorities that I have been able to consult on the subject agree that it is a disease that is largely influenced by climate, and also by the condition of the people in relation to water, and food supply. It is claimed that strangers unacclimated, coming into the locality in which it prevails, are more likely than others to contract the disease. Good says that the disease, though common to various parts of India, is chiefly met with on the Malabar coast and in Ceylon, and seems to be produced by the sudden transitions in the atmosphere from dry to damp, and from sultry calms to freshening breezes. In this region it attacks natives and strangers, but particularly the latter, in the rainy season that begins in November and terminates in March. He goes on to say that they who sleep away from home where they have no shelter, and are exposed to the chilly winds that blow at night from the mountains are most likely to suffer from it.

Christie, as quoted by Johnson, and Martin, says: "It would appear that a stay of some months on the station is almost essential for the production of the disease, and that the greatest predisposition to it exists when troops have been about eight to twelve months in the settlement.'' The same author tells us: ''I have never seen a case of the disease in a woman, an officer, or a boy under twenty, although they are liable to contract all the other diseases of the place.'' None of the other authors that I have been able to consult mention this interesting fact. Evidently the officers lived better, and the boys and women more carefully than the rest of the population. We can conclude that this rule has some exceptions, for we are told that Mr. Ridley,[2] a surgeon of the Royal Artillery, himself suffered from the disease in Ceylon, and he gives a very interesting account of the symptoms of his own case. In the matter of treatment, it seems to me that there is little of value to be learned from the earlier authors. Christie recommended a course of diuretics, and ''the liberal use of stimulants, followed by bark.'' He said if the treatment was well followed out that a cure would result in most cases in from one to three weeks. I do not think there is very much fault to be found with this plan; but, passing to the report of Mr. W. Hamilton, we are told that the first two cases that came to him were treated after the plan recommended by Mr. Christie, and that they both died. At the autopsy of one of the cases he found that ''there was effusion into the ventricles, and at the base of the brain. The lungs were loaded with dark colored blood, and water was effused into both cavities of the chest. The heart was healthy—no effusion into the pericardium; but this bag exhibited marks of inflammation, both externally and internally. The liver was larger than natural, and appeared still more loaded than the lungs. On examining the spinal marrow, evident marks of congestion were found, particularly in the dorsal region; three or four pints of effusion had taken place in the abdomen.'' From all this he concluded that ''it was a disease that arose in a great measure from obstructed circulation, in consequence of congestion in the internal parts, more especially the liver and lungs, and that beriberi could not be a mere disease of debility, but that it was a disease, in the treatment of which blood-letting might be used with great prospect of advantage.'' Having the courage of his convictions, he tells us that he took from his next case 30 ounces of blood with temporary relief, and that he was encouraged to take 35 ounces more during the next 12 hours, and went to work with 20-grain doses of calomel and 20 drops of laudanum, which dose was repeated in an hour and ten minutes, after which the patient fell into a good sound sleep. When he awoke the calomel was repeated with gamboge, and afterwards the calomel alone in scruple doses every 3 or 4 hours, till ptyalism was induced, which required more than 40 hours. "Every unfavorable symptom now disappeared, and the patient only complained of sore mouth." We are given to understand that case after case was treated in much the same way by himself and others. with the happiest effect.

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[1] Influence of Tropical Climates.

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[2] Aitken's Science and Practice of Medicine, Vol. II, page 132.

Passing now to a brief notice of what I have been able to learn from later authors, I find [3] Dr. de Lacerda, of Rio Janero, writes of a fatal disease that affected horses and swine in the island of Marajo. The affection appeared to be due to a polymorphus microphyte, which was found in the drinking water of the island. This microphyte was found to produce the disease in a number of animals—pigs, birds and monkeys inoculated with it, showed the typical symptoms and lesions or symptoms and lesions that resembled them very closely. If this be true, it throws a strong light on the etiology of the disease. Aitkin says, speaking of beriberi in the jails of Ceylon: "Since improvements have been made in drainage, and since the introduction of a mass of iron which is allowed to rust and corrode in each water chatty used by the prisoners for drinking and cooking, not a single case of beriberi has occurred during the wet season." Are we to conclude that the iron cures and prevents the anemia by adding iron to the water, or by making it impossible for the microphyte to live in the water, thereby removing the cause of the disease? In this connection it might be well to mention that Kynsey says that the disease in Ceylon is not true beriberi, but that it is caused by anemia due to a parasite in the intestines. Would this view explain the success of Mr. Christie with large doses of calomel, and did the purging remove the parasite from the patient, who then recovered in spite of the harsh treatment employed? Thornton supports this idea in his report of two cases "cured by free purging, frequently repeated; and by citrate of quinine as a tonic."

Wintraub distinguishes between two forms of beriberi, a paralytic and a hydropsic. He says that the two may be combined, and that it may take either the acute or chronic form. The alteration in the gait of the patient there is due to the dropsy and the weakness. A residence for some time in the locality is necessary, because the new-comer has to acquire the parasite. Before anything can be done for the patient, the parasite has to be expelled, and that thymol and iron are the best remedies, followed by digitalis and other drugs that stimulate the heart. In the acute form death results in a few hours, while in the chronic, recovery may take place if there are no complications, such as dysentery, etc. In speaking of autopsies, he says: "The brain and cord and their membranes were normal; but the cerebro-spinal fluid had a slightly reddish tinge, owing to the death struggle, which is something terrible to see. The signs are all those of suffocation; respiration often takes place after the heart has ceased to beat." He holds that the cause of the disturbance to circulation is in the diseased condition of the vessel walls, especially of the larger arteries, "the atheromatous condition of which indicates furious inflammatory drain, a lessened calibre, and hypertrophied heart." He believes it to be an infectious disease.

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[3] Lancet—Annual Univer sal Medical Sciences 1888, p. 135.

Mura says: In the brain and spinal cord he found nothing abnormal, except the presence of vacuoles in the ganglionic cells of the spinal cord, and he is not inclined to attach much importance to them. He found but little change in the abdominal organs, but the muscles, very commonly, showed waxy degeneration. Cardiac hypertrophy and dilatation he found in almost every case. It might be interesting to quote further, from other authors, but all that we would gain by so doing would be to have the fact more fully impressed upon us that able and earnest men are working hard to gain a fuller knowledge of it. I will now state briefly my own experience with the disease as I saw it in Hawaii, amongst the laborers on the island of Maui.

My first patients were Japanese. When I was asked to see them they were under arrest for having refused to work. They claimed to be ill, and the plantation doctor and the overseer claimed they were not. They were arrested, tried, found guilty and sent to the Wailuku jail. They had been driven about twelve miles through the dust and heat—not in a wagon, but a native policeman had ridden his mule, driving them ahead of him. They claimed that he had helped them along with the use of his whip, but I saw no evidence of such treatment, and did not think they were abused in that way. I was asked by the Sheriff to go and see them before they were locked up, as he thought they looked ill. When I saw them I did not know anything of their history.

I was asked to examine them and say whether or not, in my judgment, they were ill. I found six of them sitting on a bench, looking worn out and very tired. They all had a temperature above the normal, and a rapid, full pulse. The heart was working hard, altogether out of keeping with the other symptoms. All were complaining of pain in the legs; one or two complained of pain in the chest, putting their fingers under the sternum, and pulling at it as if to lift it out. I, of course, pronounced them ill, but of what disease I only suspected, and refused to make any diagnosis until I had watched them for a day or two. I was then told their history, and I recommended that they be sent to the hospital instead of being put into a cell. I saw them again the same day, and all doubt as to the nature of the trouble was dispelled.

The further development of the disease was very interesting to watch. The legs of all began to swell, and later on this swelling became quite general, in one or two of the worst cases. The day after they were received, three of them were unable to walk without great effort, while the others were decidedly unsteady on their feet. The worst case amongst them assumed the gait and attitude of a child, who, in taking its first unsteady steps, fearing it may fall, puts out its hands as a safeguard, reels on one foot, bringing the lifted foot with undue force to the ground. The gait is peculiar; it seems to be an effort to balance and a false judgment as to distances, rather than a shrinking to ease soreness or pain in the legs or feet. I never saw a patient who seemed in danger of falling backwards; but this may be because, as I have said, they lean forward and put out their hands. The case that I have mentioned as being worse than the others did not improve. Effusion into the chest took place, the heart's action became worse, the kidneys did not perform more than half the work they should, breathing became more and more labored, and death took place in about one week from the time that he was forced to take his long walk to jail. The other patients gradually improved till they were able to leave for Honolulu, at which place I heard that one of them died, and the others made a full recovery.

These cases were the most notable that came under my observation. They had been on the island but a short time, the vessel that they came in being still in port. The ship's surgeon visited them, and confirmed my diagnosis; indeed, they knew themselves what the trouble was, and spoke of it as "kakae," the name they give to the disease.

For the next three years I saw a good many cases of all degrees of severity, though, as a rule. of a mild form, and yielding kindly to treatment. It was a common thing in visiting a plantation to find three or four cases of the disease. Usually the first symptoms of which they complained were swelling of the legs, pain along the tibia and shortness of breath, I would usually find upon examination, palpitation, a quick pulse, and marked anemia. My method of treatment was as follows: I changed the patient's diet; where it could be had, milk was largely used, but it was scarce, and the Japanese do not like it. Fresh vegetables were given, and the best of all that we could get was tomatoes. The people most affected were in the habit of eating a deal of rice, salt fish, and such oily preparations as the Chinese delight in. Where they could be persuaded to follow out the directions, improvement was the rule from the first, if the disease was not too far advanced when first seen. Occasionally a case would grow worse and have to go to the hospital; some would fail to report for treatment after a slight degree of improvement, and getting worse, come again and again, with the disease in a chronic form.

The drug that I gave oftener than any other was digitalis. I often combined with it the citrate of potash, and when the tongue had cleaned iron was given, and sometimes nux vomica. I was much impressed with the good effect of changing the patient's place of residence, when they were living in a low, wet locality, to a high and drier location. Where this could be done, and when they were well cared for in the matter of diet, the disease was often checked without other treatment. I can recall one case in a woman, a Japanese. She was ill for some time, but finally recovered. She had worked in the field with the men, and was exposed in the same way to like influences. I do not see why the disease should not attack the female, but this is the only case in a woman that I can remember. I never saw a child affected, or a white man, or native Hawaiian. All my cases were Japanese or Chinese. If Kynsey is correct in his observations of the disease in Ceylon, we must conclude that it differs from that at Hawaii; for the women and children drink of the same water that is supplied to the field hands, and would be just as apt to receive any parasite that it might contain, and as likely to suffer from any disease caused thereby, and this is equally true of the foreigner and of the native.

We have seen that research by those who have had the opportunity of making *post-morten* examinations has not yielded the results that one might hope to find in a disease in which so many symptoms point to grave changes in the great nerve centres. I think that the paralysis is due to a starved condition of the cord rather than a changed one, and that this condition is due, in part at least to the anemia. The gait, in many cases, is very much like that of ataxia, and I cannot believe with Kynsey, that the embarassment in this respect is due to the edema of the lower extremities, as I have seen it come on before this was at all marked.

My observation would lead me to conclude that the disease is not as severe in Hawaii as in other countries, and that the worst cases seen there are brought into the country in a more or less advanced stage. While beriberi is a disease of other lands, we have three cases reported by Dr. Seguin, of New York, in 1888, and I do not see why cases might not be found on this coast almost any time. I have inquired of an intelligent Japanese, of this city, if he has ever seen a case of beriberi in this country, and he stated he had seen two in San Francisco. This may or may not be so, but to me it seems very probable, for the Japanese understand the disease, its symptoms, and its gravity very well.

212 J Street.

PRIMARY CARCINOMA OF THE LIVER.

By D. W. MONTGOMERY, M. D., Professor of Pathology, and Clinician for Diseases of the Skin, Medical Department University of California; Clinician for Diseases of the Skin, San Francisco Polyclinic.

Like all other organs of the body, the liver is at first a mass of embryonic tissue, composed of round cells. Out of this plastic mass either the simple tubular liver of the reptilia or the very complicated liver of the higher mammalia may be developed. In the normal human liver there are sometimes found nodules more or less accurately circumscribed, consisting of cells somewhat larger than hepatic cells, with better defined margins, and arranged around a central lumen like the arrangement met with in the more simple tubular glands.[1] No traces of bile are ever found in these cells, and in all probability they do not functionate. They seem to be groups of cells which have stopped in the course of their development at a stage represented by the reptilian liver, instead of going on to form the more complicated liver of the higher vertebrates. These nodules may remain wholly inert throughout the course of a long lifetime, or they may take on a sudden growth through the intervention of some unknown cause, or combination of circumstances, possibly from some slight but long continued irritation, or from some unusual flow of blood to the part. This new growth may consist either of connective tissue alveoli, containing cells arranged regularly around a central lumen, in which case it is called an adenoma, and is almost always a benign growth. The cells may be irregularly scattered in the alveoli like dice shaken up in a box, in which case it is called a carcinoma, and is a malignant growth, destructive in the locality in which it grows, and forming metastases in far distant organs. An adenoma of the liver has been known to form a metastasis, as if to show our powerlessness to make a classification where Nature has drawn no distinct lines of demarcation.[2]

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[1] Article on Adenoma by Wm. T. Councilman, in Reference Handbook of Medical Sciences.

The only rule we can go by in these cases, in attempting to form a judgment of their malignancy or innocence, is that the nearer they approach the type of a normal gland, and the more regular and orderly the arrangement of their elements, the greater likelihood of innocence. On the other hand, the more they deviate from the normal type, the more certainly will they act as cancers. The truth seems to be that these cells are dangerous individuals in the community; they have been erratic from the beginning, and the best to be expected from them is that they may remain stunted and useless members, or, if they grow, that their only crime will be the room occupied, for on apparently slight cause they may break out into the most terrible and destructive form of malignancy.

The foregoing process may, I believe, have been the origin of the cancer I shall now describe.

On March 20, 1888, Dr. F. B. Carpenter, who was then making the autopsies at the city morgue, sent me a tumor of the liver for examination, with the following history:

"Body of well-nourished man, 38 years of age, right heart filled with dark fluid blood, heart muscle soft, lower lobe of left lung solid from lobar pneumonia; both kidneys large, having appearance of chronic nephritis; bladder contracted, walls very much thickened from chronic cystitis; spleen soft, liver large and yellow, and in the middle of the right lobe, directly above the gall bladder, but entirely unconnected with it, a tumor the size of a small orange."

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[2] Perls, Virchow's Archiv, vol. 56, p. 436.

The tumor was a node lying in the depth of the right lobe. When cut into it looked like a perfectly round, ripe, succulent fruit let into the liver substance; there was a glistening callous rind, about an eighth of an inch in thickness, surrounding a purple, hemorrhagic, reticulated centre. There were no satellites in the neighborhood, nor were any other tumors found in the liver or in any part of the body. An oblong block of tissue was cut out of the tumor, including the advancing callous margin, and also the purple hemorrhagic centre. Sections from this block showed, admirably, the nature of the growth. The callous margin was seen to consist of a dense connective tissue stroma, including in its alveoli, cells, showing an attempt at a tubular arrangement; farther in, the alveoli became much larger, the tumor lost all resemblance to a tubular gland, and there were abundant hemorrhages into the alveoli. It looked as if the connective tissue partitions between large groups of alveoli had broken down, forming much larger alveoli. The diagnosis was primary hemorrhagic adeno-carcinoma of the liver. There was extensive fatty infiltration of the liver, and the interlobular tissue in the neighborhood was densely infiltrated with round cells—an interlobulitis, in fact, probably from the irritation of the advancing tumor.

Carcinoma originating in the liver is not by any means frequent, although, as long ago pointed out by Virchow, secondary deposits, or metastases, occurring from cancer in some other part of the body are very frequent, and often grow to a very great size, far outstripping at times the primary growth. Hausemann has gone over the records of cases occurring in the Berlin Pathological Institute from 1870 to 1889 inclusive, and finds in all 258 cases. Only six were primary in the liver, and two of these are rather doubtful, the notes not being full enough to permit of certainty. He found that men and women were affected in about equal proportion. Age, however, plays an important role, for much the larger number occur in old age, though some undoubted cases have been observed in children.[3]

Primary cancer of the liver occurs in three chief forms; as large nodes, sometimes a solitary node, or a large node with a few satellites in the neighborhood; as a diffuse infiltration, which, before microscopical examination, may easily be mistaken for ordinary cirrhosis of the liver; or, lastly, as nodules, following the course of the portal vessels. The present is of the first variety. As for diagnosis, none could have been made in this case; it is even very doubtful if the disease had given rise to any symptoms. If his life had not been cut short by an intercurrent, lobar pneumonia symptoms, of course, would naturally have come with the development of the disease. Even in cases far advanced, where symptoms are very pronounced, the diagnosis of cancer of the liver is so surrounded with difficulties as to render it little more than a guess—a guess which we often hazard only to the relatives, and not to the patient.

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[3] Ueber den primären Krebs der Leber, Hausemann, Berlin. klin. Wochenschrift, November 16, 1890.

It must be admitted that the future holds out very little hope of making an early diagnosis in this class of cases. A great advance has been made of late years in our ability to recognize cancers at an early period of their history in situations where we are able to see them, and, if necessary, remove a piece for histological analysis; but cancer of the liver is very often a riddle, the first satisfactory solution of which takes place on the *post-mortem* table.

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DEPARTMENTS.

OBSTETRICS, GYNECOLOGY AND PEDIATRICS.

By WALLACE A. BRIGGS, M. D., Sacramento, Cal. and

HENRY GIBBONS, JR., M. D., Professor of Obstetrics and Diseases of Women, Cooper Medical College, San Francisco, Cal.

Conservative Gynecology.—Gynecology, says DOLÉRIS, has passed through three periods—the obstetrical, the medical and the surgical, and each has brought its contingent of useful knowledge—data of anatomy, of physiology, of pathology or of therapeutics. Gynecology now has resolutely entered the surgical period, the most brilliant of all, vouchsafing the most rapid progress and the most certain results. Physiology is the basis of this departure, and conservation of function is its primordial end. This idea may be best developed by illustrations: *Corporeal Endometritis.*—This may be cured either by caustics or by the curette. May they be used indifferently? By no means. Violent caustics destroy the mucosa in its entirety, entailing amenorrhea, sterility and atresia of the uterine canal. The deeper layers of this tissue, on the other hand, are respected by the curette and suffice for the regeneration of the entire membrane. The former destroy function, the latter preserves it. *Cervical Metritis.*—Obstinate inflammatory ectropion is frequently treated by caustics either actual or potential. The cicatrization ensuing oftener results in follicular occlusion and consequently in sclero-cystic cervical metritis than in definitive atrophy of the diseased mucous membrane. Conservative surgery, on the other hand, armed with the knife, removes the diseased tissues by a clean section and thus presents the restorative procedure *par excellence.* *Displacements.*—Every procedure that unites the uterus to the parietal peritoneum is untrustworthy. The adhesions gradually yield and sometimes disappear altogether. Plastic operations on the vagina combined with resection of the round ligaments restore the physiological supports and practically realize a return to the normal condition. These procedures in 7 cases of 60 have been followed by pregnancy. . Abdominal fixation results in failure in nearly half the cases, and never cures sterility. *Ovaro-Salpingitis.*—Without recourse to a radical operation cure may be obtained by minor means, that is by dilatation, curetting, prolonged drainage, revulsives, rest, baths, massage, electricity, etc. In more than a third of 140 cases, by simple means, Doléris has obtained such amelioration that the patients declined any intervention whatever. Of 30 other cases more rebellious he employed intrauterine means with success in all but 8. Of the latter 2 were papillary vegetations of the tube, 1 was multiple and voluminous cysts of the pavilion, 3 were pyo-salpynx and 2 were abortive tubal pregnancies. In 25 cases of inveterate salpingo-ovarian lesions connected with retroversion or prolapse, failure resulted only twice. In 39 cases he practised laparotomy and extirpation of the diseased organs at once. Of the entire number the annexes were extirpated in one-third, and in the other two-thirds. Symptomatic cure has been obtained either without or with minimal surgical intervention. The lesson to be derived from these facts is that we should ordinarily begin treatment by medical means, followed if necessary by minor surgery, and only on failure of these should we proceed to definitive sacrifice. The future belongs to those who cure without destroying. It is consecrated to restoration and conservation and not to destruction.—*Gazette de Gynécologie*, October 15, 1890.

What I Have Learned to Unlearn in Gynecology.—Under this caption DR. WM. GOODELL gives his experiences. He has learned that the climacteric is not responsible for most of the ills of motherhood, and especially, for menorrhagia, as popularly taught; that uterine hemorrhages, indeed, and other uterine discharges, can rarely be traced to the climacteric as a cause in itself; that the so-called "critical discharges" and "change of life" are misnomers which, too often, lead to indolent diagnosis and slovenly therapeutics. He has learned that operations, if time be precious, need not be deferred on account of menstruation. The menstrual period is the best time, in fact, to curette for fungous vegetations. The only operations which offer serious objections at this period are those upon the uterus itself, and because of its increased vascularity and danger of hemorrhage. He has learned that anteflexion and antiversion in themselves—without narrowing of the canal—are not necessarily pathological; that pessaries for these conditions, except occasionally a stem pessary for stenosis, are rarely useful; that irritable bladder is generally the result of nerve exhaustion, a lack of brain control, and not of pressure of an anteflexed fundus. He has long abandoned the idea that the parturient woman must be swathed like a mummy and be kept as immovable. He finds no objection to her turning from side to side, sitting up, and even getting up to use the commode, if she feels like it. He does not believe that mammary abscess comes from "caked" or overdistended breast, but from cracked nipples; that uterine catarrhal secretions are any greater drain than those from the nose, or that they require heroic treatment; that cellulitis is at the bottom of most female ailments, and that the hot water douche is its cure-all. He believes that the latter has even caused ovaritis, salpingitis and periuterine inflammation, and that the supposed cellulitis and exudations are usually tubal and ovarian lesions. The hardest task of all was to learn that uterine symptoms are not always present in uterine disease, or that when present, they necessarily come from uterine disease. They are nerve symptoms. Nerve-strain or nerve-exhaustion comes largely from the frets, the griefs, the worries, the carks and cares of life, and their symptoms simulate uterine disorders, and are almost uniformily attributed to them. The tricky nerves, when underfed or overworked, or out of discipline, billet themselves upon some maimed organ, and hold high revel there. Thus, a woman hitherto in perfect health, though having an adherent or dislocated ovary, a torn cervix, a narrow cervical canal, a slight displacement, has her nervous system unstrung and at once there are set up vesical, uterine and ovarian symptoms. Dr. Goodell sums up his gynecological creed: "I believe that the physician who recognizes the complexity of woman's nervous organization and appreciates its tyranny, will touch her well-being at more points, and with a keener perception of its wants, than the one who holds the opinion that woman is woman because she has a womb."—*Medical News*, November 29, 1890.

The Value of Electricity in the Treatment of Uterine Fibroids.—It seems to be established, say Labadie, Lagrave and Requier, that electricity may be useful in the treatment of uterine fibroids—notably in the arrest of hemorrhage and the relief of pain. It seems to be the best resource in inoperable fibroids. None of the methods now extolled fulfils all of the indications. That of Apostoli is difficult. In case of erroneous diagnosis, of careless application, or of imperfect antisepsis, it is even dangerous. It would therefore be imprudent to recommend it to those who have not had a large experience in gynecology. The method of Danion and Championnière is not applicable in all cases. In young women it is almost impracticable on account of the nervous excitement caused by the necessary current strength. It has succeeded only in women approaching the menopause when the symptoms frequently improve without treatment. Its results are therefore doubtful. The perfect method has not yet been found.—*Medicine Modérne*, October 16, 1890.

Seven Cases of Endometritis Treated Successfully by Curetting Combined with Other Procedures.—Within the last two years and a half PARA has curetted the uterus 9 times: 4 times for chronic endometritis of the body and neck; three times for hemorrhagic endometritis; 2 times for uterine cancer. The last two are omitted from present consideration. Curetting is easily done and, in corporal endometritis, gives excellent results. *Antisepsis.*—Curetting is free from danger, if a rigorous antisepsis be observed before, during and after the operation. In the majority of cases, in fact, its success depends on the establishment of asepsis before the operation and its maintenance, until the uterine mucosa is restored to its normal condition. It is to his rigid observance of antiseptic precautions that Para ascribes the fact that he has no failures to report. *Dilatatiou.*—If the cervical canal is not sufficiently open to admit the curette, Para proceeds to progressive dilatation by means of iodoformed laminaria tents. In one case he completed the dilatation with prepared sponge. Anesthesia is useful, but not indispensable. In most cases, especially if the cervix be patulous, the operation is not painful. [My own observation leads me to a different conclusion: Curetting is a painful operation and generally is more satisfactorily done under ether.—W.A.B.] Para administers chloroform only when curetting is associated with another operation. *Curetting and Ecouvillonage.*—Para adopts the method usually recommended. He uses Doléris' modification of the Recamier curette and always follows it with the ecouvillon.* The ecouvillon completes the action of the curette and removes the debris left by the latter. Besides, after curetting, it is an excellent applicator in cauterizing the mucosa with creasote. *Trachelorraphy and Shroeder's Operation.*—In three cases of chronic general endometritis Para associated trachelorraphy, and in two cases Shroeder's operation with curetting. Following the example of Richelot, Pozzi and Doléris he employs catgut sutures and has had no failures with them. In twelve or fifteen days the catgut is absorbed and the wound completely cicatrized. Richelot and Doléris would restrict the use of the curette to corporal endometritis. When the cervix is diseased Richelot advises either Emmet's or Shroeder's operation; the former for laceration with vicious cicatrization; the latter for ectropion with intense gladular lesions. *Hersage.*—In the latter cases Doléris seeks to preserve the cervical tissues as far as possible and applies the general principles of the most rigorous conservative surgery. Having dilated the cervix for several days he attacks the entire intracervical mucosa with the "herse."† The teeth of the herse penetrate the tissues deeply and lacerate the glandular *culs-de-sac* and the sharp curette completes the work by removing the lacerated tissues and smoothing the intracervical wall. In a young woman suffering with general endometritis with moderate eversion Para obtained an excellent result with curetting combined with "hersage." *Results.*—All of Para's cases were cured. In five, relapse had not taken place at the end of 18 months; the remaining two became pregnant and were delivered at term without accident. —*Gazette des Hôpitaux*, October 9, 1890.

A New Operation for Uterine Fibroids.—To induce atrophy of uterine myomata PROF. RYDYGIER proposes ligation of their nutrient arteries. He assumes that the remedial effects of ligation will be similar to those of

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* A brush very much like the one used for cleaning a gun barrel.

† A small toothed instrument.

Hegar's (Battey's) operation, and prefers the former because, as he asserts, it is more certain in its results, easier of performance and more readily accepted by the patient. He reports the following case: A woman 49 years of age presented herself with a uterine fibroid as large as the double fist in the anterior wall. Laparotomy was done and the spermatic and uterine arteries, as well as the round ligaments of both sides were ligated. Uninterrupted recovery. The hemorrhage which set in on the day of operation ceased at once after the ligatures were applied. Four months afterward the tumor was found reduced three-fourths in volume, and the patient was entirely relieved. Rydygier recommends ligation in medium-sized intra-mural fibroids, and prefers his own intra-peritoneal method to the extra-peritoneal method proposed by von Gubaroff.—*Wien. klin. Wochenschr.*, *Schmidt's Jahrbücher*, No. 11, 1890.

Appendicitis in the Female.—As the result of his observations, RICHELOT presents the following conclusions: (1) On account of the proximity of the uterine annexes the diagnosis of appendicitis is more difficult in woman than in man. Suspicion is naturally aroused when the pain and induration are well up in the iliac fossa and entirely to the right, and should always be excited whenever the symptoms are markedly predominant on the right, even if there be evidence of lesions to the left; even if the pain be referred to the uterine annexes, and even if rectal and vaginal touch reveal induration at the right border of the uterus. (2) With the reserves already formulated surgical intervention should be bold and early. The prognosis of the disease left to itself is extremely grave. The earlier the operation the more it approaches in relative benignity the modern operations in the region of the uterus.—*Union Médicale*, November 4, 1890.

External Migration of the Ovum.—From the results of ten experiments on female rabbits in which the ovary of one side and the tube of the other had been removed, VARICELA concludes: (1) That the external migration of the ovum, although rare, is incontestible. (2) That only part of the ova are able to reach and enter the tube of the opposite side. (3) That although it requires more time for the ovum to pass from the ovary to the tube opposite than to the tube of the corresponding side, still in doing so it retains its aptitude for fecundation. (4) The external migration of ova experimentally produced was in no case the cause of extrauterine pregnancy. (5) That granting the integrity of one ovary and of the opposite tube, not only fecundation but also intrauterine pregnancy are possible.—*Annali di Obstetricia e Ginecologia*, October, 1890.

SURGERY.

By T. W. HUNTINGTON, B. A., M. D., Surgeon Southern Pacific Company's Hospital Sacramento, Cal.,
J. F. MORSE, M. D., Surgeon German Hospital, San Francisco, Cal., and
G. F. SHIELS, M. D., C. M., F. R. C. S. E., Surgeon Polyclinic, San Francisco, Cal.

Removal of the Breast during Hypnotic Sleep.—DR. SCHMELTZ has removed a sarcomatous breast during anesthesia caused by hypnotism.

The operation lasted an hour. The patient remained absolutely insensible in a condition of complete anesthesia, and assisted the doctor by changing her position, and laughed in order to show she suffered no pain.—*Gazette Médical de Strassburg*, July 1, 1890.

In the *Journal of the American Medical Association*, of October 11, 1890, a translation is given of an edict of the Russian Medical Department forbidding hypnotic performances as being dangerous to the welfare of the health of the subject and audience, but at the same time allowing its use by the medical profession, providing two or more medical men be present. [The inconsistency of this edict is obvious, since hypnotism would be equally injurious whether produced by a qualified medical man or not. Any practice, whether medical or otherwise, which interferes with the psychological entity of an individual, must be considered as wrong in its inception. We have means at our disposal for producing anesthesia, and there is no justifiable reason why a medical man should, as it were, take advantage of his patient's weakness, and substitute his own will for the will which is inalienably the right of even the most hysterical, nervously, unbalanced individual to possess. It is a dangerous precedent for any man to demonstrate that he, by a peculiar nerve strength, can subdue and subjugate to his own ends the minds and wills of others. It is unnecessary, on the face of it, to point out the innumerable bad objects on which such a power could be brought to bear.—G. F. S.]

Treatment of Torticolis by Open Operations.—M. PHOCAS, in a paper on this subject, gives good authority for the open operation in cases of obdurate torticolis, in place of the subcutaneous method, and urges that with antiseptic precaution the danger of suppuration, etc., which was the reason for the subcutaneous operation, is practically done away with. Certainly it gives the surgeon a much better view of the field of his operation, and helps him to discriminate more clearly between tissues which should be severed, and those which should not. There are, moreover, cases of inveterate, old torticolis, as is shown by Volkman, in which the subcutaneous method is quite out of the question. M. Phocas quotes a number of interesting cases which support this view.—*Gazette des Hôpitaux*, October 23, 1890.

OPHTHALMOLOGY, OTOLOGY AND LARYNGOLOGY.

By WM. ELLERY BRIGGS, M.D., Sacramento, Cal.

Papillitis.—DR. C. S. BULL says that the most common cause of this condition is intracranial disease, and that tumors are the most frequent of the lesions producing it. The frequency and severity of the papillitis does not seem to be materially influenced either by the nature, size or location of the tumor. The next most usual cause is meningitis, then abscess of the brain, hydatid disease and softening from thrombosis or embolism. Papillitis is also occasionally met with in acute disease of the spinal cord. He believes that optic neuritis, limited to or most intense in the optic disc, may occur without any apparent intracranial disease. Pure papillitis is known to occur in simple anemia. It seems, therefore reasonable to conclude that the intraocular end of the optic nerve is a structure peculiarly prone to inflammation. Dr. Bull tabulates the following conclusions: (1) In cases of cerebral tumor, evidence of descending inflammation may be traced in the sheath or nerve much more commonly than is generally supposed, while in cases of meningitis the evidence of descending inflammation is almost invariable. (2) The resulting papillitis may be slight or may grow intense, but we are ignorant of the causes which bring about the difference. (3) The mechanical congestion in these cases of papillitis does not always result from compression of the vessels behind the sclerotic ring, but does always follow compression from inflammatory exudation in the papilla. (4) Slow increase of intracranial pressure has no effect on the retinal vessels, but sudden increase of such pressure may intensify a papillitis orignating in some other way. (5) Distension of the sheath alone is probably not sufficient to cause papillitis by its mechanical effects, but it may intensify the process otherwise set up.—*Medical and Surgical Reporter*, January 3, 1891.

Optic Neuritis Including Alcoholic and Tobacco Amaurosis.—DR. A. KNAPP states that the cases in which patients notice a haze, a blur, even a perfectly dark patch in the centre of the visual field, known under the name of central scotoma, as well as those cases in which persons lose their sight in one or a few days without exhibiting any ocular or general disease to account for it, were explained more than 20 years ago by A. von Graefe and Theo. Leher. They supposed the condition to be an inflammation of the orbital part of the optic nerve, retro-bulbar neuritis. This hypothesis has since been proven to be a reality by an anatomical investigation. Retro-bulbar neuritis might be idiopathic, or the result of different kinds of intoxication, alcoholism, nicotinism, lead poisoning, diabetes, syphilis, etc. The condition might take on an acute or chronic form. One of some microscopical specimens exhibited showed the central neuritis in the period of nuclear infiltration, another in the stage of connective tissue hypertrophy. The process was characteristic of the limitations of its area of inflammation, circumscribed and triangular near the disc. In one, the changes passed like a band from the temporal border of the nerve across to the nasal side. In all of the specimens a certain number of healthy nerve fibres were seen preserved in the atrophic parts. This showed how, in alcoholism, total blindness was rare, and how, on the other hand, in the field of vision of persons blind from retro-bulbar neuritis, islets of useful sight were permanently preserved. Retro-bulbar optic neuritis presented examples of peripheric neuritis of great practical importance.—*Medical and Surgical Reporter*, January 3, 1891.

Surgical Treatment of Granular Conjunctivitis.—DR. A. DARIER says that of all the medicines which are at present employed to combat granulations of the conjunctiva, sulphate of copper still remains the most efficacious, but it cures completely and permanently only a minority of the cases. The treatment has of late become more surgical. Following the practice of Sattler, Dr. Darier has divided the operation into six steps: (1) Anesthesia. (2) Enlargement of the palpebral opening by a cut at the external canthus with the scissors. This procedure is of great importance in cases in which there is incurvation of the tarsal cartilage and contraction of the palpebral opening, and also in other cases, as it permits exposure of the whole conjunctival surface. To preserve the effect of the operation, three sutures are introduced, uniting the conjunctiva and skin. (3) Complete inversion of the lids to expose the whole conjunctival surface. To avoid the abundant flow of blood the lower lids should be operated upon first. The border of the lid is grasped with a forceps and then drawn down so as to bring the palpebral *cul-de-sac* in view. For the upper lid a special forceps is necessary in order to bring the upper border of the *cul-de-sac* to light, and to do so it is necessary to turn the lid upon itself. Having exposed the whole extent of the conjunctiva, proceed to step (4) Deep scarification and parallel squeezing of the palpebral border. The scarification is to preserve the conjunctiva and at the same time expose the infiltrated sub-conjunctival tissue. A small bistoury with two cutting edges is used for this purpose. After arresting the hemorrhage, proceed to step (5). Scraping with Volkmann's curette. This is important where the infiltration is hard and sclerotic. (6) Energetic brushing with a stiff and short-haired brush while bathing the surface with a 1:500 sublimate solution. This is to be continued until all the granular tissue has been removed. The after treatment is simple. The patient should remain in the ward or go home in a carriage, and keep cold sublimate compresses applied for two days. The third day an application of sublimate solution 1:500 is made to the everted lids. At home the patient bathes the eyes frequently with sublimate 1:2000. At the end of 8 to 15 days the eyes are well. Dr. Darier's experience leads him to commend this method very highly.—*Progrès Médical*, December 23, 1890.

SYPHILIS AND VENEREAL DISEASES.

By G. L. Simmons, Jr., M. D., Sacramento, Cal.

AND

DERMATOLOGY.

By D. W. Montgomery, M. D., Professor of Pathology, University of California, San Francisco.

Dandruff.—Dandruff is looked upon by most people as a rather troublesome, but otherwise unimportant affection, whereas baldness is considered a real calamity. Acne is also an extremely annoying disease, from which many have struggled in vain to free themselves. Pityriasis, or dry seborrhea, or dandruff, has long been blamed by dermatologists for much of the baldness that exists, and this pityriasis is now held by Unna to be a parasitic disease due to a microphyte which lodges in the hair sheath, and in the attached sebaceous glands. This microphyte may not alone cause a loss of hair, but may, in falling down, be caught by the fat exuding from the sebaceous glands of the face, and of the integument over the chest, both front and back, infecting them and giving rise to a persistent acne, which may be cured by curing the affection of the scalp. This view of the case seems reasonable as well from what we know of the frequency of parasitism in nature, as from the favorable conditions offered by the scalp for the hiding and maintenance of parasites. DR. EDWARD BLAKE, in the *Lancet*, Dec 27, 1890, reports two very instructive cases of acne pustulosa which had persisted for a long time, stubbornly resisting treatment till the accompanying pityriasis of the scalp was cured, when the acne got well of itself. He recommends very highly a treatment advised by Dr. Shuldham, which consists in washing the head with hot water and alcohol soap. The alcohol soap consists of two ounces of pure soft soap, half an ounce of alcohol, and ten minims of oil of lavender. After thoroughly cleansing and drying the scalp, a glycerole of tannin, from 10 to 30 grains to the ounce, should be rubbed in. Should the tannin fail, which it rarely does, a resorcin ointment may be used. This procedure ought to be repeated once, twice, or thrice a week, according to indications. The soft soap for making the alcohol soap should be carefully chosen, for cotton seed oil is said frequently to be substituted for olive oil in its manufacture.

MATERIA MEDICA AND THERAPEUTICS.

By WM. WATT KERR, M. A., M. B., C. M., Professor of Clinical Medicine, University of California, San Francisco.

Hydronapthol as an Antiseptic.—DR. BRYCE furnishes us with some further results of his investigations into this subject. Preliminary examination with an aqueous saturated solution and also with a boiled and subsequently filtered solution, proved that each, after one hour's exposure, failed to kill staphylococcus pyogenes anreus, though the boiled solution was effective after twenty-four hours. It therefore became necessary to obtain a solution stronger than could be obtained in water alone. A spirituous solution, with the addition of glycerine in excess, was more satisfactory, the glycerine preventing the precipitation of the hydronapthol on the addition of water.

Hydronapthol	1 part	1 part
Rectified spirit	9 parts	
Glycerine	9 parts	

Making a one per cent. solution of hydronapthol. The results of experiments with this solution showed that hydronapthol in the proportion of 1:400 is a powerful and reliable antiseptic. Its insolubility in water is its great disadvantage, and a cheap, reliable method of preparing an efficient solution must be devised before it can have any extensive application in surgical practice.—*British Medical Journal*, November 22, 1890.

Guaiacum as a Purgative.—Guaiacum has been variously described as stimulant diaphoretic, diuretic, alterative, and even consigned to oblivion as an obsolete and antiquated drug. My attention was first drawn to its purgative effects two years ago by casually prescribing for a patient suffering from rheumatism some guaiacum lozenges made up with black currant paste. He continued taking them long after the pains had ceased, because one or two lozenges taken in the morning before breakfast acted on the bowels promptly and without inconvenience. I ordered the lozenges for other patients suffering from constipation and "biliousness" and the result was equally satisfactory. In hospital practice a confection was made with ten grains of guaiacum to a drachm of honey and was useful not only as a laxative, but in the treatment of chronic rheumatism, sciatica, tonsilitis, dysmensorrhea and allied affections. At first I gave it in drachm doses once a day, but I had to increase the dose to two or three drachms daily. In this amount the purgative effect is very pronounced, one patient having fifty-six evacuations in the week, while in another case the patient was covered with a rash resembling that of copaiba. The burning in the throat can be avoided by prescribing it with half-ounce doses of extract of malt. I am sure that a trial of the guaiacum resin as a laxative or purgative, according to the dose employed, will be found satisfactory. It is possible that if the drug were triturated with cream of tartar, sugar of milk or some other equally inert substance, its efficacy would be increased, and it would produce the desired effect in smaller doses.—DR. WM. MURRELL in *Medical Press and Circular*, November 5, 1890.

Sulphonal in Diabetes.—DR. CASARELLI mentions the favorable action of sulphonal in diabetes. The drug diminishes both the quantity of sugar and the polyuria, doses of forty-five grains *per diem* being the most effectual. The drug, however, could not be long continued in such quantities without causing giddiness and excessive sleepiness. Sulphonal was used with good results in conjunction with both a mixed diet and a strictly meat diet; in the latter case a large quantity of sugar appeared in the urine as soon as the sulphonal was stopped.—*Lancet*, November, 1890.

Aristol.—Aristol is a combination of thymol with iodine, and may be used as a substitute for iodoform. It is applied to the skin in the form of a ten per cent. ointment, and covered with gutta percha paper. DR. P. J. EICHOFF has used it in cases of varicose ulcer, ulcerative lupus of the face, chancroid, psoriasis, herpes tonsurans, eczema, and congenital syphilitic ulcer. From his experience he concludes that aristol is always harmless, non-poisonous and odorless. In only one case—chancroid—was its therapeutic action less satisfactory than would have been expected with the use of iodoform. In psoriasis, although slower than chrysarobin, pyrogalic acid, etc., it is free from unpleasant effects. In varicose and syphilitic ulcers a quicker result may be expected from its use than by any other means. The same may be said of its use in lupus. The remedy should be given a thorough trial in surgical and gynecological practice.—*Boston Medical and Surgical Journal*, November 27, 1890.

MEDICINE AND PATHOLOGY.

By ALBERT ABRAMS, M. D., Demonstrator of Pathology, and Adjunct to the Chair of Clinical Medicine, Cooper Medical College, San Francisco, Cal.

Koch's Treatment of Tuberculosis.—The first authentic clinical reports of this method of treatment are as follows: PROF. OSCAR FRAENTZEL began his investigations September 13, 1890, with phthisical as well as non-phthisical subjects. In healthy persons the injection of Koch's fluid in small doses was followed by no reaction; after a large dose, reaction was manifested by a rise of temperature, pains in the extremities and malaise. The fluid is of great diagnostic value in latent tuberculosis by the local and general reactionary manifestations following its injection. The remedy was administered in four cases of advanced phthisis, in all of which the pulmonary tuberculosis process was not checked. In eight other cases, represented by patients in the early stages of the disease, the results were as follows: About six hours after the first injection, chills developed, followed by a rise in temperature to and above 40° C., anorexia, malaise, etc. These symptoms followed subsequent injections to a minor degree, eventually ceasing even after the dose of the remedy was increased. The tubercle bacilli are not wholly destroyed, but are diminished in number and altered in shape and size in the sputa. In every case of phthisis treated after this method, when alteration in size and shape of the bacilli was observed, the lung consolidation was resolved, fever and night sweats disappeared, the appetite and the weight increased. Fraentzel considers the possibility of future reinfection from the tubercle bacilli which are not destroyed, but remain in the organism. **PROF. V. BERGMANN** reports investigations with Koch's remedy in the following: (1) Lupus. (2) Tuberculosis of the lymph glands. (3) Joint and bone tuberculosis. (4) Tuberculosis of the larynx. In the lupus cases, the average injection was 1 centigramme, which was followed by the general symptoms previously described and by local symptoms. The latter were manifested by redness and swelling of the lupus tissues. A fact of special interest noted in these cases was the redness and swelling of apparently normal structures adjoining the tissues affected with lupus. One case of lupus was practically cured, while the others, 12 in number, were improved. As tuberculous tissue alone reacts to the injection of Koch's fluid, its value in differential diagnosis was shown in the following case. A well-developed man consulted v. Bergmann with reference to a neoplasm on his cheek, which was diagnosed by different physicians as carcinoma. The injection of Koch's fluid showed no reaction, and a piece of the extirpated growth examined under the microscope, proved it to be a syphiloma. The Berlin correspondent of the *Weiner medizinische Presse* reports that in conversation with many colleagues in Berlin, the opinion was freely entertained, "that as yet, no completely cured case of tuberculosis by Koch's method could be produced." The same correspondent then details the *technique* of the injections as observed at the clinic of Fraentzel. Koch's normal solution is an odorless fluid of the same color as Bavarian beer. If the fluid has become cloudy it is necessary to boil it in a sterilized test tube before using. The injections are made with Koch's balloon syringe, which, before use, is cleansed with absolute alcohol; the alcohol is then evaporated by a current of air blown through the cylindrical tube of the syringe. After the needle is disinfected in a 2 per cent. solution of carbolic acid, 1 ccm. of the normal solution is aspirated into the syringe, after which it is thrown into a sterilized vessel, to which is added 9 syringefuls of a ½ per cent. solution of carbolic acid, making the concentration of the normal solution equal to 10 per cent. This is the strong solution. The weaker solution is made by mixing 1 syringeful of the strong solution with 9 syringefuls of a ½ per cent. solution of carbolic acid. The concentration of the weaker solution is 1 per cent. Fraentzel begins his treatment with 0.001 ccm. of this solution. Injections are made below the scapulæ. He reports a case of death following the injection of 0.2 ccm.—*Weiner med. Presse*, November 23, 1890.

PROF. DR. HUEPPE, of Prague, refers to the curability of phthisis, which is no longer questioned. In well regulated sanitaria, conducted according to the plan of Brehmer, phthisis in its incipiency is curable in 50 per cent. of the cases. As a means of diagnosis in doubtful cases of tuberculosis, Koch's fluid is invaluable. Acute miliary tuberculosis, which has always been recognized as an incurable disease, may now yield to the action of this remedy. Hueppe recognizes the correctness of Koch's statement by insisting on treatment in well regulated institutions. The fact that the tubercle bacilli are not destroyed by this method of treatment always renders the danger to reinfection possible, but Hueppe believes that experiments made on animals warrant the assumption that a certain immunity to tuberculous infection can be secured for individuals thus disposed. **DR. KOEHLER** formulates the following conclusions: (1) It admits of no doubt that with Koch's remedy we are able to diagnose with certainty surgical tuberculosis in its very earliest stages at a time when all other diagnostic means are valueless. (2) Koch's remedy is of great value in differential diagnosis. With it we can exclude tuberculosis with certainty. (3) Koch's remedy is a curative agent against tuberculosis; to what extent this is possible can only be taught by time. A qualitative analysis of Koch's fluid was made in the chemical-microscopical laboratory of Dr. Jolles, in Vienna, showing it to consist of albuminoid substances belonging to the toxalbumine group. The presence of metallic substances was positively excluded.—*Weiner med. Presse*, November 30, 1890.

At a meeting of the Vienna Medical Society, Dr. Jolles referred to the examination of sputa of phthisical patients treated with Koch's fluid. The tubercle bacilli were found to be contracted and degenerated.—*Wiener klin. Wochenschr.*, November 27, 1890.

DR. DENGEL suggests the prophylactic administration of phenacetin to combat the elevation of temperature following the injection of Koch's fluid.—*München. med. Wochenschr.*, November 25, 1890.

LUBLINSKI refers to the undoubted value of Koch's fluid in laryngeal tuberculosis. The local reaction in the larynx following the injection was swelling and redness of the affected parts. In one case, where the diagnosis wavered between syphilis and lupus of the larynx and pharynx, an experimental injection decided in favor of the latter affection. **HERTEL** reports the results attained in 18 cases of laryngeal tuberculosis, at the clinic of Gerhardt. Improvement was noted in all the cases, but too little time had elapsed for cures.—*Deutsch. med. Wochenschr.*, No. 48.

At the clinic of Dr. William Levy, experiments with Koch's fluid were first made and the results attained in phthisis are reported by **FIELCHENFELD** (*Therapeutische Monatshefte*, November, 1890). Three patients with incipient phthisis were discharged as cured. These cures were based on the absence in the sputa of tubercle bacilli and the disappearance of auscultatory signs of phthisis. In advanced cases of phthisis, especially when cavities have developed, although no cures are reported, decided relief was obtained.

PROF. E. LEYDEN reports (*Berliner klin. Wochenschr.*, Dec. 8, 1890) the results with Koch's remedy, at his medical clinic, from Nov. 20th to 27th, 1890; but the time was too short to note any positive results. Injections were made in four or five cases of pleuritis and in all a reaction was observed. In one of these cases, tubercle bacilli appeared in the sputum after three injections, whereas before the injections no expectoration was present. Leyden always believed that serous pleuritis was an expression of latent tuberculosis, and at times many years may elapse before these patients become affected with tuberculosis. This view received confirmation by the reaction following the injection of Koch's fluid.

PROF. H. SENATOR (*Berliner klin. Wochenschrift*, Dec. 10, 1890), observes, that the duration or severity of the reaction following the injection is in no wise influenced by the severity or extent of the tuberculous process. Injections must be interdicted in advanced cases of phthisis. **HENOCH** used the fluid in tuberculous affections of children. One case of chronic tuberculous peritonitis was decidedly benefited, while in a case of tubercular meningitis, death followed the use of the remedy. [From the literature on the subject up to date, we may conclude: (1) That Koch's remedy has a specific action on tuberculous tissues. (2) While it is of great value in diagnosis, it is not absolute. With a few tuberculous subjects no reaction follows the injection, whereas, in a very limited number of healthy persons, a reaction may be observed. (3) In lupus and laryngeal tuberculosis, cures have practically followed the injections. In chronic cases of pulmonary tuberculosis, the remedy, as a rule, did not favorably influence the course of the disease, although in a few cases, decided benefit was observed. In incipient phthisis, a few cases have been cured.—A. A.]

MENTAL DISEASES AND MEDICAL JURISPRUDENCE.

By A. W. HOISHOLT, M. D., Assistant Physician, State Asylum for Insane, Stockton, Cal.

Dissimulating Lunatics.—In a recent work on the subject of dissimulation of insanity, DR. MARANDON DE MONTYEL says that alienists not infrequently meet with insane patients who conceal in whole or in part their delusions, some in defiance and, to some extent, unconsciously, others consciously and with a definite object in view. This remarkable disposition indicates the conservation of certain mental faculties. Such patients constitute one of the most dangerous classes of insane, as persons inexperienced in mental diseases are apt to become deceived and to believe that those who thus dissimulate are not really insane. The difficulties of diagnosis in cases of dissimulation are far greater than in those of simulation, and the consequences, which errors may lead to, are much more serious. To determine the insanity of the dissimulator requires great experience and familiarity with the insane, as well as perseverance and sagacity in the interpretation of the least morbid signs. Of the six cases reported by Dr. de Montyel one is especially remarkable. A young man, twenty years of age, the son of an insane father, whose insanity was characterized by delusions of persecution, believed that his mother wished to poison him, and under the influence of this delusion he abandoned himself to all sorts of violence towards her. One day he tried to shoot her and, his insanity becoming thereby manifest, he was confined in an insane asylum. During the months which followed his commitment he continued to manifest marked delusions. Finally one day he appeared to abandon his delusions, ceased to complain of his mother and even expressed sentiments of affection for her, declaring that his grievances were the simple result of mental aberration. A year passed. The patient, who appeared absolutely sane, demanded his liberty. Before setting him free, three physicians were asked to pass an opinion upon his condition. These physicians were not experienced in the practice of mental medicine, and, but for the attempted assassination, which had been the occasion of his incarceration, they would have voted for his immediate discharge. It seemed to them wise, however, to defer judgment. For a whole year they kept the patient under observation, watching him as closely as possible without being able to detect a single sign of insanity. They regarded the test as sufficient, and concluded to set him at liberty. The asylum physician, who up to that time had remained diffidently neutral, became shaken in his convictions and joined his colleagues. The discharge was granted, and the patient left the asylum accompanied by his mother, who had herself come to remove him, happy in the belief that her son had really recovered. On that very evening he murdered the poor woman with a hatchet, and on the following morning, proud of his act, presented himself at the entrance of the asylum, after having written to the magistrates, who had caused him to be set free, a letter, in which he thanked them for the facility that had been afforded him to accomplish that, which he regarded as an act of justice. In this letter he avowed his dis simulation.—*American Journal of Insanity*, October, 1890.

Manslaughter by a Faith-healer.—A certain well-known citizen, of the city of Toronto, who for some time had suffered from diabetes and had been subjected to a rigorous diet, thought he would avail himself of the benefits of faith-cure, and accordingly placed himself in the hands of a Mrs. Stewart, one of the apostles of this art. Being, by her instruction, freed from all diabetic restrictions, he speedily died of diabetic coma, and an inquest being held, the jury found that "he came by his death through the gross ignorance of Mrs. Stewart, who undertook to cure him of his disease, in not advising him to continue the restricted diet prescribed by his former physician." Mrs. Stewart is now awaiting her trial for manslaughter.—*Journal of the American Medical Association*, November 1, 1890.

Severe Sentence on a Midwife.—At a court of law at Bocham, in Prussia, a midwife has lately been sentenced to three years and a half imprisonment. In spite of the fact that she was officially forbidden to practice her calling for a certain length of time, in consequence of a prevalence of puerperal fever among her patients, attributed to her negligence, she continued to attend her labor cases; the result was that death from septicemia occurred in one case, and the life of another was seriously imperilled.—*Medical Press and Circular*, October 22, 1890.

Sexual Perversion.—At a meeting of the Société de Médicine Legale, MOTET reported the case of a young man who was arrested for attempting to cut off the hair of a young woman. In his rooms was found a quantity of hair. This individual had a marked neurotic heredity from both the father and the mother. He was an intelligent and skilful mechanic. In 1886, after an attack of herpes intercostalis, he began to act queerly and to be possessed of the imperative conception to cut off women's hair. As soon as the shears touched the hair he had an erection, and the cutting was followed by an ejaculation. He was declared insane and irresponsible, and was sent to an asylum, where, after a time, he recovered from his peculiar propensity and later resumed his profession.—*Progrès Médical.—Journal American Medical Association*, October 18, 1890.

The Differential Diagnosis of Hypochondriaca Melancholia, and the Hypochondriacal Stage of Paretic Dementia.—DR. E. RÉGIS quotes the following points of contrast between hypochondriacal melancholia and certain stages of paretic dementia, from the writings of various authors on the subject: "The hypochondriacal delirium of general paralysis has a special characteristic of absurdity, dulness and incoherence. It appears suddenly and is mobile and inconsistent. The patients argue and speak as if hardly in earnest; they do not emphasize their complaint naturally. The delirium of melancholia may be monstrous, but it has not the same inconsistent absurdity. The patient believes in his disorder, reasons about it, explains it, and endeavors to convince, becoming excited at contradiction. In general paralysis the hypochondriacal delirium may be complicated with exalted ideas; this is never the case in melancholia. In the former the patients are not hereditarily disposed, nor have they had prior nervous disorders; and the delirium is not favorably influenced by morphine; the reverse is the rule in ordinary melancholia. General paralysis occurs usually between the ages of 35 and 45; its hypochondriacal form follows the same rule. Physical examination of the different organs of the body almost always gives negative results, while in the general paralysis there are often from the beginning slight apoplectiform or epileptiform attacks and spinal or pupillary symptoms. In melancholia of the anxious type the hypochondria is accompanied with ideas of damnation and of obsession, analgesia, impulses to suicide and self-mutilation for fear of not being able to die." These differentiating characters taken from the literature of the subject are not always satisfactory, the typical forms being so nearly alike in both diseases. In order to solve the problem it is requisite, Dr. Régis says, to take into account all the clinical facts that may serve as distinctive. He therefore adds the following points of difference suggested by his own observation: "Melancholia with hypochondriacal delusions is met with at an advanced age, from 45 to 60. It is more common among females than males, in the proportion of 11:8, which is contrary to what occurs in general paralysis. It is like every other form of insanity, much less frequent in those who have suffered from syphilis than is general paralysis, so that the existence of a prior syphilitic infection causes a strong presumption in favor of general paralysis. The symptoms of hypochondriacal melancholia are not the first ones presented by the the mental ailment; they do not occur until after some months or some years, and always consecutive to delusions of culpability with which they remain associated. The hypochondriacal delirium is fixed and persistent, being rarely accompanied with hallucinations, but terrifying dreams, fear of dying, refusal of food and tendency to suicide are almost the rule. The patient is subject to paroxysmal crises, more or less acute. For years the intelligence remains intact, the recollection good and the mental clearness and power are retained to a greater or less degree, sometimes entirely. Examination of the viscera is usually negative; nevertheless we frequently meet with a torpid condition of the stomach and bowels, increased frequency of pulse, palpitations and, less frequently, other functional disturbances. Emaciation is progressive and rapid, sometimes amounting to a veritable cachexia. Recovery is possible, though the case may terminate in marasmus and may pass into the chronic stage.—*Gaz. Med. de Paris.*—*American Journal of Insanity*, July, 1890.

Epidemic Hysterical Ecstasy.—DR. J. W. HJELMANN gives (*Finska Läkare-Sällskaps Handl.*) an interesting account of an epidemic of hysterical religious ecstasy that occurred in the northeastern part of Finland and began at a dance, a girl of 16 years of age being the first subject. During the course of the entertainment the patient was suddenly seized with violent convulsions. A few days later a second girl was also seized with similar convulsions, and in a very short time 20 or 30 persons, mostly young women, were similarly affected. During the first part of the epidemic the symptoms were merely those of convulsions, but later, after recovering from the convulsions, some of the patients began to preach and the populace came from far and near to hear these "inspired" sermons. Many of the listeners had their initial convulsions of a hysterical nature during these meetings. Anesthesia was present in a few cases, and in the milder ones a hysterical hiccough took the place of the convulsion. These manifestations were present in about 50 cases, of which 5 were men. With the approach of winter the epidemic gradually died out, after having lasted for half a year. Hjelmann calls attention to the fact that the province in which the epidemic existed is almost shut off from intercourse with the outside world, and that the intellectual development of the people is unusually low. A similar religious movement had occurred in the province 50 years before. In Arabia among the Mohammedans, and in India among the Fakirs, religious festivals are attended by similar epidemics even at the present day. The following is the description of the scenes at one of these festivals: A "son of the Prophet" was seated on a canopied dais at one end of the enclosure, and in a imprisonment. In spite of the fact that she was officially forbidden to practice her calling for a certain length of time, in consequence of a prevalence of puerperal fever among her patients, attributed to her negligence, she continued to attend her labor cases; the result was that death from septicemia occurred in one case, and the life of another was seriously imperilled.—*Medical Press and Circular*, October 22, 1890.

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The Neuroses of Development.—PROF. CLOUSTON, in a recent lecture on this subject, calls attention to the fact that the brain is found to have reached its maximum weight at about 17 or 18 years, although it has attained its full growth to within a few ounces at the age of 7 years. From birth to 17 is the period of combined growth and development of the brain, from 17 to 25 is the period of brain development without growth. During the two periods of increase of bulk and development of function the cells of an organic tissue, as has been proved by physiological and pathological facts, have different qualities and are subject to different diseases; and during these periods the cells of the brain have qualities differing from those possessed by them at maturity, which it takes 7 or 8 years to develop fully. The differences between what the brain of the child and that of the man can do is quite indescribable; the organ of these two periods might belong to two different species of animals. So far as microscopic appearances are concerned, the tissues are often much the same whether or not an organ is fully developed in function, owing to our present imperfect methods of histological research; and still it must be assumed that where difference of function exists there must also be difference of structure. Clouston divides life into two physiological eras of non-productive and reproductive capacity. Speaking of the relation of pathological disturbance to the commencement and perfection of certain physiological functions, he said that the most serious of all pathological defects of the brain function are neuroses incidental to the period of development; the reproductive function is then arousing the keenest emotions, the most vivid imaginations and the most earnest volitional efforts at the same time that the brain is discharging motor, sensory and trophic functions. It is a physiological fact that one organ may be fully developed and yet other organs in the same body be still undeveloped. Although the child's skin is softer than that of an adult, yet it is not so resisting to the germs of ring-worm and many skin diseases, and for that reason may be said not to be mature. Scarlatina, ring-worm and similar diseases may be looked upon as due to development or trophic defects, just as rickets undoubtedly is. Nervous tissues take the longest time to develop and of all tissues are the latest in coming to perfection. While a red blood-corpuscle probably becomes fully developed in the second month *in utero*, a cell of the cortex does not attain maturity until the age of 25. It is during the period of development that hereditary influences for good or evil come out; in an exceptional way this is especially true of those tissues which develop slowly. The following is the order of development of the great brain functions: first the trophic function, next common and special sensation, then coördinated motion, then the various mental faculties, then the coördination of motion and emotion, and last that of reproduction. The reproductive function takes several years to develop after its first appearance, and is to be regarded as but an incident in a continuous protoplasmic life, which makes a man continuous with his ancestry and posterity. Hereditary defects are brought out at certain stages: (1) *In utero*, in which the lesions are extremely coarse defects. (2) At the period of most rapid brain growth (from birth to the age of 7) attended by such diseases as convulsions, epilepsy, meningitis, etc. (3) During the period of coördination of motion and emotion which precedes the period of reproductive growth (between 7 and 13) and is wonderfully free from neurotic defects; and (4) During the period of puberty and adolescence (from 13 to 25) which is characterized by the development of neuroses affecting the mind. Sometimes disease results from an abnormal order of development, one function or faculty remaining undeveloped, while others are normal or over-developed. Child-musicians and child-poets are more or less pathological; it is general development which is to be encouraged. It is often unfortunate that qualities as courage, obstinacy and self-confidence should be present before enough judgment has been developed to regulate them. Such instances are indications of error in order of development. The development of the mental and physical functions must be in proper series.—*Lancet*, November 15, 1890.

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A Heavy Brain, with Remarks on the Specific Gravity of Separate Parts of the Brain.—PROF. OBERSTEINER, of Vienna, in an article upon this subject, first refers to the lowest weight of the brain in persons mentally sound, which in the case recorded by Bischoff was only 820 gm. (25⅝ ounces—the average weight in the female is 44 ounces and in the male 49½ ounces); it was the brain of a woman aged 53. Prof. Obersteiner, however, has a brain in his laboratory, which, with the membranes, weighs only 788 gm. The patient had been able to attend to the wants of daily life and converse upon the most varied topics. The brain substance was traversed by fissures of various sizes, the results of "old encephalitis." He next discusses the highest recorded weights and dismisses as quite false the statements concerning the brains of Cromwell and Byron. Bischoff records weights of 1925 and 1770 gm. The brain of the celebrated Russian, Turgenjeff, which was examined by eminent Parisian physicians, weighed 2012 gm. The brain, which Prof. Obersteiner records, was that of an individual of medium height and average build, a Jew. His mental faculties had been well developed, but he had never engaged in a serious vocation and had squandered a considerable fortune; he died at the age of 58. The brain, in the fresh state and stripped, weighed 2028 gm. The convolutions were strikingly broad, but there was no diminution of their number. Microscopical examination of the cortex revealed no peculiarities. The case demonstrated the already established fact that extraordinary amount of brain substance may be associated with ordinary intellectual capacity. He then considers the specific gravity of the brain and finds that the frontal cortex is the lightest, the occipital the heaviest. The central medulla of cerebrum and that of cerebellum are heavier than the cortex and of equal specific gravity; heaviest of all is the pons. The thalamus is heavier than the corpus striatum on account of the greater amount of its white substance. —*Centralbl. f. Nervenheilk. u. Psych.—American Journal of Insanity*, October, 1890.

Medical Liability for Accidents.—The following case shows how little the unbounded charity so often claimed of medical men is sometimes appreciated by the poor. In the Supreme Court of New Zealand an action was lately brought against the South Canterbury Hospital, by the father of a child supposed to have been injured through the neglect of the hospital board. The child, though too young for admission, being only seven months old, was taken in as a matter of necessity, and as no nurse could be spared for its exclusive care, it was entrusted, with the mother's sanction, to a young convalescent patient. Through some neglect on the part of the latter, the infant was scalded by a steam kettle, not very severely, however, and recovered. The accident was thus, as the presiding Judge remarked, one such as might occur in any household in the course of treatment, and for which the hospital board could not be held responsible. Judgment was therefore given for the defendants with costs, and a sound rating was administered to the plaintiff along with the verdict. The ingratitude disclosed in this case, shows that in the minds of certain persons, charity is never genuine, unless it can be made as irksome and unpalatable as possible to the bestower. In view of possible contingencies like the above, it might be well for hospital authorities to consider whether they ought not, after the manner of some commercial companies, to disclaim, *ab initio*, all liability for accidental injury to patients who may be placed in their care.—*Lancet*, September 27, 1890.

An Unusual Case of Tongue Bite.—A singular case of tongue bite has been reported by MR. M. D. MAKUNA. An old man was lying in bed, when his son-in-law coming home drunk, made an assault upon him. In the struggle he took hold of the old man's throat to throttle him, thereby making the tongue protrude to its furthest extent. Immediately the assailant stooped over and bit it, causing a lacerated, dentated wound, resembling in shape the arch of the jaw. The hemorrhage was not profuse and the wound has healed up, leaving a jagged cicatrix.—*British Medical Journal*, September 13, 1890.

PUBLIC HEALTH.

By W. R. CLUNESS, M.A., M.D., Sacramento, Cal.

Mortality.—The deaths registered in 93 town districts of the State during the past month, in a population of 754,169, correspond to an annual rate of 19.19 a thousand, the total mortality having been 1,196. 128 deaths were due to zymotic diseases, giving an annual rate of 2.04 a thousand. Of these 63 were due to diphtheria, 36 to typhoid fever, 12 to cholera infantum, 9 to diarrhea and dysentery, 5 to cerebro-spinal fever, 2 to scarlet fever and 1 to whooping cough. 346 deaths resulted from diseases of the respiratory organs, giving an annual rate of 5.04 a thousand. Of these 169 were due to consumption, 140 to pneumonia, 28 to bronchitis and 9 to pulmonary congestion; the rate being for consumption and pneumonia, 2.89 and 2.22, respectively. 84 deaths resulted from diseases of the heart. The average annual death rate from all causes, occurring in the 10 largest cities and towns in the State, and representing a population of 547,250, was 19.32. The highest rate for the month, occurring in cities having a population of 10,000 or more inhabitants, was reported from Alameda, the lowest from Chico and vicinity.

METEOROLOGY.

By J. W. ROBERTSON, B.A., M. D., San Francisco, Cal.

Summary for December.—*Temperature.*—Over the greater portion of California the temperature was extremely mild, though from that portion north of Shasta cold weather was reported. The minimum temperature did not reach freezing point, though frosty mornings were noted at all stations. This was especially noticeable in Southern California, but only lasted for a few days.

Rainfall.—The rainfall for December was below normal, ranging from 5 to 3 inches along the coast, and from 3 to 1.5 inches in the valley belt. There were but few cloudy days noted, and during the greater part of the month clear days were reported. Eleven cyclonic areas were reported from the coast north of Vancouver, and of these only two materially affected the rainfall along the California coast. It is owing to the northerly course of these storm centres that there is a deficiency in the rainfall.

California—Tabular Statement for December, 1890.

STATIONS.		TEMPERATURE.						RAINFALL.		Mean Relative Humidity	WEATHER.			WIND.	FURNISHED BY—
		Mean	Highest	Lowest	Mean Highest	Mean Lowest	Mean Daily Range	No of Days Rain Fell	Total Rainfall		No. of Clear Days	No. of Fair Days	No. of Cloudy Days	Prevailing Direction.	
Auburn	Cal.	47.1	60.0	35.0	60.0	35.0	------	5	------	------	13	----	18	E.	Southern Pacific Co.
Berkeley	"	48.1	65.8	33.5	57.0	42.4	14 6	8	3.32	85.9	16	6	9	N.N.E.	Obs. Univ. of Cal.
Colfax	"	48.3	70.0	33.0	70 0	33.0	------	5	7.39	------	18	----	13	N.E.	Southern Pacific Co
Eureka	"	48.4	66.0	36.0	54.4	42.3	12.1	14	5.48	90.3	8	12	11	S.E.	Signal Service U.S.A.
Fresno	"	43.4	70.0	28.0	49.4	38.2	11.2	5	2.30	93.2	1	6	24	S.E.	" " "
Keeler	"	42.5	61.0	29.0	50.5	34.5	16.1	3	0.22	54.4	11	6	14	E.	" " "
Los Angeles	"	58.6	82.0	43.0	70.9	51.6	19.3	14	2.32	56.4	13	12	6	N.	" " "
Monterey	"	52.5	66.0	32.0	66.0	32.0	------	7	2 66	------	20	----	11	S.	Southern Pacific Co.
Napa	"	47.3	62.0	30.0	62.0	30.0	------	4	3.41	------	10	----	21	S.W.	Sta. Napa Ins. Asylum
Oakland	"	47.4	69.0	33.0	------	------	20.2	6	3.19	82.1	16	7	8	N.W.	Chabot University.
Paso Robles	"	46.2	70.0	26.0	70.0	26.0	------	4	3.34	------	25	----	6	S.	Southern Pacific Co.
Red Bluff	"	44.8	64.0	29.0	52.9	37.2	15.7	13	3.20	86.2	11	11	9	N.W.	Signal Service U.S.A.
Sacramento	"	43.2	61.0	33.0	48.6	38.1	10.5	5	3.34	84.2	5	6	20	N.	" " "
San Diego	"	59.8	79.0	47.0	69.2	52.3	16.9	6	1.61	64.4	14	5	12	N.W.	" " "
San Francisco	"	49.7	60.0	39.0	54 8	44.9	9.9	6	3.25	83.5	9	13	9	N.	" " "
Santa Barbara	"	58.5	76.0	43.5	68.0	49.0	19.0	5	3.53	63.6	19	4	8	W.	Hugh D. Vail.
Santa Cruz	"	53 1	76.0	38 0	76.0	38 0	------	3	2.34	------	24	----	7	N.W.	Southern Pacific Co.
Yuma	A. T.	59.3	77.0	35 0	70.2	50.2	20.0	5	0.52	49.2	13	10	8	N.	Signal Service U.S.A.

Blank (----) indicates data missing.

Occidental Medical Times.

JAMES H. PARKINSON, L. R. C. S. I., EDITOR.

COMMUNICATIONS are invited from all parts of the world. When necessary to elucidate the text, illustrations will be furnished without cost to the author.

SACRAMENTO: FEBRUARY, 1891.

THE TWENTY-NINTH SESSION OF THE LEGISLATURE.

No. 1.

The twenty-ninth session of the Legislature, commencing Jan. 5, 1891, has so far produced the usual prolific crop of bills. This Legislature, however, has evinced a marked capacity for work, and already considerable progress has been made. The profession is represented in the Assembly by Dr. C. G. Cargill, of Santa Barbara, and Dr. N. Martin, of Placer. There is no representative in the Senate, but Senator Simpson, of Alameda, has charge of several medical matters. The following bills are of interest to the profession:

All the Asylums want appropriations, and several of them need the sums asked. Appropriations, however, will be very closely watched by a Legislature pledged to a 50-cent limit. It is to be regretted that the unnecessary, or perhaps premature, multiplication of these institutions seriously interferes with those already established or in operation. The State Reform School, at Whittier, wants $173,400, and should certainly have it. The institution will serve an excellent purpose. It is one of the few located in Southern California, and as a good deal of work has already been done, it needs but little to place it in active operation. The asylums at Stockton, Napa, and Agnews all need additions, repairs or improvements, and ask appropriations for these purposes.

Senate Bill 40 (A. B. 202) provides for the appointment of a State Veterinary Surgeon. This bill met with general favor at the last session, and passed both Houses, but failed to receive the Governor's approval. The present bill is similar in its provisions to the former measure. Senate Bill 84 (A. B. 188) provides for the regulation of the practice of pharmacy and sale of poisons. This bill was also introduced at the last session, but failed to pass. It is an excellent measure that commends itself to the public without argument. The expenses of the proposed board are to be met by the fees collected. Senate Bill 163 (A. B. 75) provides for the appointment of inspectors of plumbing and drainage in cities, or cities and counties—1 to 3 in cities of less than 100,000 inhabitants, and not less than 3 nor more than 5 in cities of over 100,000. The inspectors are to be appointed by Boards of Health, or, in their absence, by Health Officers, and must be practical plumbers, duly registered and licensed. The provisions of the Act are quite stringent; plans, specifications, new work, defective work, and nuisances from same, are to be examined, and failure to remedy same when required, will be a misdemeanor. Senate Bill 213 (A. B. 187) makes it the duty of the governing body in towns and cities, population not mentioned, to award an exclusive contract, yearly, for the removal of garbage, offal, ashes and other refuse, contents of privy vaults and manure excepted, at a rate of one dollar per month upon each householder. The garbage is to be removed at least once a week, between 6 P. M. and 6 A. M., to some remote place, "and there subjected to a fire heat of not less than 212°" [F.]. Except that it may promote more systematic cleanliness, it does not seem that this measure will improve the general condition of our cities, and a higher temperature than 212° F. is certainly necessary for the destruction of garbage. Senate Bill 239 (A. B. 218) relating to the establishment of local Boards of Health was passed at the last session, and has been reintroduced simply to amend an error in its date of operation.

Senate Bills 240 (A. B. 217) and 242 relate to the registration of births, deaths and marriages. These bills were amongst those introduced at the last session of the Legislature by the State Board of Health, but failed to pass. Senate Bill 354 (A. B. 240) is the new medical bill with which our readers are already familiar. It is not perfect, but it is the best measure that is possible under existing conditions. Should it become a law it will certainly elevate the standard of medicine in this State in the future, by guaranteeing that every holder of its certificate, regardless of his diploma, possesses a certain knowledge of the fundamental principles of the healing art. Remembering this, and that it is legislation for the future, every practitioner, regardless of his individual tenets, who honestly desires to see an improvement in professional standards, should give the bill his hearty support. Senate Bill 324 (A. B. 326) has about it certain elements of novelty. It provides for a State Board of Funeral Directors, consisting of three practical and practising funeral directors. It shall be the duty of this Board to examine all persons intending to practise as undertakers, and if reasonably competent, to issue a license to them. This license is to be recorded in the office of the County Clerk and of the Board of Health. It is specified as part of the duty of the funeral director that he shall in case of infectious disease, thoroughly disinfect the body and the room in which death occurred, within four hours after notification, and report same to the health office. The act is not retrospective. Senate Bill 66 makes the aduleration of olive oil a misdemeanor, and provides that a label stating the name and address of the maker and place of manufacture, must be affixed to every bottle or can of oil a; copy of the label being filed with the State Board of Horticulture.

Senate Bill 241 appropriates $10,000 for the purchase of a site and erection of a building under the direction of the State Board of Health, as a State Leper Asylum. . We have long since pointed out the necessity for an institution of this kind, and an additional argument may be furnished by the recent experience of San Francisco, that a pest-house is not the place to care for lepers. We trust that economy may not interfere with the establishment of this very necessary hospital. Senate Bill 248 appropriates $80,000 for a college for the Medical Department of the University of California, to be located in San Francisco. Senate Bill 278 makes it a misdemeanor to sell or dispose of any intoxicating liquors within one mile of the grounds of any Reform School or place of confinement for juvenile offenders.

Assembly Bill 350 provides that upon sworn complaint any person having in his possession an animal affected with glanders or farcy, may be arrested and punished for misdemeanor. Assembly Bill 305, relating to actions against physicians and surgeons for malpractice, failed to pass at the last session, and has now been reintroduced. We have already alluded to its importance and value to the profession. Assembly Bill 270 (S. B. 268) provides for the appointment of a State Sanitary Inspector. This bill at the last session passed both Houses of the Legislature, but failed to receive the Governor's signature. Its need is very apparent; and it can best be advocated as a really economic measure. Assembly Bill 251 provides severe penalties for the sale or use of opium prepared for smoking. Assembly Bills 107, 168 and 275 deal with the use of tobacco by minors. Bill 107 is aimed at cigarettes only, and makes the age 16. Bill 168 includes all kinds of tobacco, and makes the age 18. Bill 275 also includes all forms of tobacco, but makes the age 16, and excepts "articles furnished on physician's prescriptions." Assembly Bill 201 provides for the registration of practitioners of veterinary medicine and surgery at the office of the County Clerk. Six months after the passage of the Act, none can register except those having diplomas; previous to the three years actual practise as shown by affidavit will be sufficient. This measure would probably be inoperative, and in any case is of questionable utility. Assembly bill 313, relating to the same subject, so closely resembles the present Medical Practice Act that it may be said to possess all the defects of that measure.

THE CONTEST IN THE STATE BOARD OF HEALTH.

We have already alluded to the contest for a seat in the State Board of Health, in the case of Lane *vs.* Tyrrell. The case had been tried before Judge Van Fleet, in the Superior Court of this county, and decided in favor of the respondent, J. R. Laine. From this judgment and an order denying a new trial, the defendant appealed to the Supreme Court, which rendered a decision January 17, 1891, reversing the judgment and order of the lower Court. The principal points of the decision are as follows:

"We think the commission issued by the Governor to appellant on November 17, 1884. must be held to have legal effect, simply as an appointment to fill the vacancy then existing, until the adjournment of the next session of the Legislature, as the Governor was not authorized to make an appointment for any longer time than during the recess of the Legislature. (Pol. Code, Section

1000.) Upon the issuance of this commission the appointment to fill such vacancy temporarily was complete, and needed no action of the Senate to confirm it. (People *vs.* Cazneau, 20 Cal. 504.) And we think that under this commission the appellant was vested with the right to hold said office until the appointment and qualification of a successor, in the mode provided by law Section 879 of the Political Code declares: 'Every officer must continue to discharge the duties of his office, although his term has expired, until his successor has qualified,' and Section 1000 of the Political Code does not create an exception to this rule, in the case of officers temporarily appointed by the Governor. The language of that section, 'but the person so appointed can only hold the office until the adjournment of the next session of the Legislature,' simply means when construed with Section 879, as it must be, that the term of such appointed officer *shall expire* upon the adjournment of the next session of the Legislature, and his successor may take his place; but if no successor has been appointed, then the very condition of affairs intended to be provided for by Section 879 has arisen and that section applies. It is the settled law of this State that the mere expiration of the term of the incumbent of an office does not create a vacancy therein such as the Governor alone is authorized to fill by the appointment of a successor. (People *vs.* Tilton, 37 Cal. 614; People *vs.* Bissell, 49 Cal. 407.) It would follow from this that the appointment of the relator during a recess of the Legislature was invalid, unless, under Section 996 of the Political Code, a vacancy was created by the failure of the appellant to take and file his official oath after the confirmation of the Senate. The obligation to take and file such oath did not arise unless the message of the Governor announcing the appointment of appellant during the recess, and the action of the Senate advising and consenting to the same, constituted an appointment of appellant as his own successor. But even construing these acts of the Governor and Senate as a nomination and confirmation of appellant as his own successor (and whether they can be so construed we do not determine), such appointment was not completed, no commission having been subsequently issued to the appellant."

A careful reading of this decision shows that the judgment of the lower Court has been sustained except on the one point as to the effect of Section 1000 of the Political Code. The lower Court held that under this section the office became vacant, and the Governor was authorized to make a new appointment at the expiration of the next session of the Legislature after Tyrrell's temporary appointment. The Supreme Court says, however, that Section 1000 is controlled by Section 879 of the same Code, and that therefore Tyrrell could continue to hold, notwithstanding the expiration of his term, until the Governor and Senate, acting together, make appointment of his successor. It therefore appears that Dr. Tyrrell's term of office really expired in March, 1885, and that he has since continued "to discharge the duties of his office although his term has expired" almost six years ago, awaiting the appointment and qualification of his successor. A condition of affairs that has added neither to the dignity nor usefulness of the State Board of Health has therefore been ended, and it is unlikely that these circumstances will again arise. The law is only invoked when a contest is made, and this is infrequent, for usually when an incumbent is plainly informed that he is "not wanted," he gracefully makes way for his more fortunate successor.

NOTES.

Dr. G. L. Simmons, Jr., of Sacramento, one of the editors of the journal, has gone to Berlin for the special purpose of investigating the new treatment of tuberculosis. Dr. Simmons, who will be absent for several months, will act as the representative of the Medical Department of the University of California, and of the California State Board of Health

The Ten-Block System.

Mr. A. L. Bancroft's system of country house numbering and road naming, that has already been described by Dr. Potter in this journal, seems to be meeting with universal favor from the press. There can be no question as to its utility and the innumerable advantages that it carries with it. The system will probably soon be adopted in Contra Costa county, where its practical working will be watched with much interest. There is no class in the community more interested in the perfection and universal adoption of such a plan than the medical profession, and if sucessful we hope the example of Contra Costa county will soon be followed by every county in the State.

Santa Barbara's Climate.

Mr. Hugh D. Vail, our meteorological correspondent at Santa Barbara, furnishes the following summary of the weather at that favorite resort, for 1890: The mean temperature of the year was 60.2°. On 41 days the temperature rose above 80° in the warmest part of the day, and on six it fell below 35° at night; while there were but two nights when it did not fall below 65°. The highest temperature was 98°, and the lowest 33.5°. There were 238 clear days, 47 fair days and 80 cloudy. There were 21 days when the rainfall was over one-tenth of an inch, but only eight that could be called rainy. The mean relative humidity was 70, and the average velocity of the wind 3.3 miles an hour, while the greatest movement in any one day was 249 miles, or less than 10.5 miles an hour.

The Alumni Association Cooper Medical College.

At the last annual meeting of this Association, held in November. 1890, a new constitution and by-laws were adopted; the object of the change being to increase the Society's activity and influence. Hitherto the transactions of the meetings have consisted of the election of new members, receiving the reports of committees, the election of officers, etc., but under the new order of things, quarterly instead of annual meetings will be held, which are to be of a literary and social character. At each meeting a programme will be presented, consisting of papers or discussions on medical topics. The next meeting will be held on the evening of February 16th, at the residence of Dr. Isabel Lowry, 848 Van Ness avenue, San Francisco. Among other interesting features, a paper on "Liver Surgery" will be read by Dr. J. F. Morse. The officers for the current year are: President, C. E. Farnum; 1st Vice-President, Isabel Lowry; 2d Vice-President, W. F. Cheney; Recording Secretary and Treasurer, D. F. Ragan; Corresponding Secretary, G. B. Somers.

SOCIETY PROCEEDINGS.

SAN FRANCISCO COUNTY MEDICAL SOCIETY.

Regular Meeting, December 9, 1890.

The President, A. P. Whittell, M. D., in the Chair.

New Members.—The following were duly elected members of the Society: S. S. Clarke, M. D., Tenison Deane, M. D., V. W. Smiley, M. D., L. M. Lane, M. D., J. S. Stone, M. D., Leo Newmark, M. D., H. R. Brown, M. D.

Dr. H. Ferrer.—The following resolutions were adopted by the Society:

Whereas, On the 22d day of October, 1890, there died Dr. Henry Ferrer in the fortieth year of his life; therefore, be it

Resolved, That the San Francisco County Medical Society recognizes in the death of DR. FERRER a loss to it of one of its brightest members, and to the State of California of one of its most distinguished physicians. That this Society has ever considered DR. FERRER as one of those rare men who have combined with great skill in a special department of medicine an indomitable enthusiasm for general science; that in his genial life amongst his colleagues in San Francisco he ever labored as an exponent of what should be the ideal of a thorough, conscientious, scientific surgeon; that the sentiments herein expressed be in some fitting manner conveyed to the bereaved widow of our late fellow; and further be it

Resolved, That these resolutions be spread upon the minutes of this Society.

DR. J. F. MORSE opened the discussion on Extirpation of the Uterus by a short history of the operation, in which he referred to the chief changes that had marked its progress, and among these mentioned the collection of twenty cases in A. D. 1600, most or all of which were incomplete; and other reports of cases at varying intervals until the first sub-peritoneal operation was done by Langenbeck in 1813. Probably the next step of great importance was Freund's method, introduced in 1878, in which he advocated an incision through the linea alba, with removal of the ovaries in patients who had not reached the climacteric period. Dr. Morse thought that the indications for the operation were still doubtful, but it might be undertaken: (1) In carcinoma of the uterus, where it may have extended to the vagina and broad ligaments, but where infiltrations of the pelvic tissues could not be detected. (2) Sarcoma under similar conditions. (3) Complete prolapsus uteri, where all other treatment has failed. (4) In extreme retroflexion, where the uterus is bound down by adhesions and cannot be cured, great relief might be afforded to the patient by removing the organ. In the case of malignant disease, where the cervix alone appears to be affected, it is even then better to remove the whole organ, as it is impossible to tell the extent of cellular infiltration. Removal *per vaginam* is the safer operation, as the risk of hemorrhage is much less, but in those cases where the growth is too large to pass through the canal, then Freund's method, or some of its modifications, must be adopted.

DR. W. H. MAYS believed that under ordinary conditions the results from extirpation of the uterus should be as favorable as those from ovariotomy. In malignant disease he thought the operation should not be undertaken unless the uterus is freely movable, or fixed by adhesions only due to perimetritis, and where the disease does not invade the vagina or adjacent structures. Vaginal extirpation for carcinom now ranks as favorably as extirpation of any important organ; indeed, statistics of eighty cases collected in Dresden showed a mortality of only five per cent., while Billroth maintains that the mortality in amputation of the breast is ten per cent. During the operation the lithotomy position is better than that of Sims', as it is calculated to maintain more accurately the normal anatomical relation of the parts. He also found the clamp more useful than the ligature.

DR. C. B. BROWN would not, in the present state of knowledge, recommend extirpation in cases of permanently retroflexed uterus, as there is great difficulty and danger of hemorrhage in dividing the adhesions. The clamp is much better than the ligature, as it prevents retraction. The future of the operation promises well, as the only danger, where the abdomen has not been opened, is hemorrhage, and this, generally, can be avoided.

DR. ST. GEORGE GRAY called attention to the importance of making a correct diagnosis in the early stage of the disease, as it occasionally happened that malignant disease was mistaken for simple erosion of the cervix, and the treatment, as well as loss of time, favors the further infiltration of the surrounding tissues. One cause of mortality is sepsis, as shown by the statistics of Schroeder and Hoffmeyer, where thorough cleansing of the vagina prior to the operation materially diminished the mortality.

DR. D. W. MONTGOMERY said that Williams maintains that where the cervix alone is apparently affected that part only should be removed, as the tendency of the disease is to extend laterally and not upwards into the body; but, while in most cases this may be the case, there can be no doubt that it very frequently becomes infected, and therefore he believed total extirpation to be the safer treatment.

DR. J. ROSENSTIRN believed that where, to the naked eye, the vaginal portion alone appears to be affected, still the body would show under the microscope distinct cellular infiltration both in carcinoma and sarcoma. He did not think that Schroeder's statistics, upon which Williams' opinion is based, are as favorable as those of Martin, where the whole uterus was removed. Personally, he was in favor of complete and early operation before there was any chance of the glands in the pelvis being involved; but it was impossible to say how long life was prolonged by the operation, as he knew two cases of epithelioma both of which refused treatment, yet one of them lived for seven years and the other is still alive, although the disease has existed for more than five years.

DR. D. W. MONTGOMERY said that Dr. Rosenstirn's remarks upon the value of non-operative treatment reminded him of a case which he examined and found cancer cells, and yet the uterus had been curetted twelve years ago by Mr. Lawson Tait. The varieties of carcinoma are very great, some of them growing rapidly and others very slowly; it would, therefore, be of the greatest benefit in prognosis and treatment if the character of each tumor could be ascertained.

DR. F. B. CARPENTER thought that the anatomical characters of the tumor alone could not always decide the question of operation, since there might be accidental conditions, such as continuous hemorrhage, which would render operation imperative. When operating he preferred the lateral position, as it was easier to arrest hemorrhage should the vessel escape into the pouch, and the vagina could more readily be emptied of clots. He also preferred to ligature the broad ligament with silver wire, clamped with shot.

DR. MORSE did not think that the operation need be entirely subperitoneal. He had frequently removed a small piece of peritoneum with the fundus, and with proper antiseptic treatment no unfavorable symptoms followed. He thought that in these cases of extreme retroflexion, where the patient was continually suffering and in some cases bedridden, that extirpation was justifiable.

Regular Meeting, December 23, 1890.

The President, A. P. WHITTELL, M. D., in the Chair.

New Member.—W. F. CHENEY, M. D., was duly elected a member of the Society.

Urethral Surgery.—DR. H. W. YEMANS read a paper upon this subject. During his service in the U. S. Marine Hospital he had seen and treated some 500 cases of urethral disease, on about 200 of which he had operated. In examinations we often find our instruments arrested by the circular fibres, which exist in the membranous and bulbous portion, and when operating we should remember that the roof of the urethra is less vascular than the floor, except immediately behind the meatus, and incisions should be made accordingly, to avoid hemorrhage. There are two, sometimes three, varieties of stricture: spasmodic, organic and, what is essentially the same as organic, traumatic. Others speak of soft (which is purely spasmodic), cicatricial, and nodular—the two latter are varieties of organic. In locating strictures we are frequently aided by dividing them into three varieties—spasmodic, organic and traumatic. Spasmodic occurs only in the membranous or bulbous portion. The organic is usually found within two, at most two and one-half, inches from the meatus. The traumatic may occur at any point. The spasmodic often simulates the organic, hence most authorities, except recent ones, maintained that the most frequent seat was the membranous portion. Organic stricture is never relieved by simple dilatation, while the spasmodic variety is. May this not account for the many reported cures by gradual dilatation and electrolysis; the latter I maintain is no more than simple dilatation. Congenital narrowing of the meatus occurs more frequently than is generally supposed, which, together with elongated prepuce coincident or separately may produce troubles similar to other forms. The principal causes of stricture are congenital deformities, gonorrheal infection and traumatism. Gonorrheal infection is the most frequent, though we must in justice to our patients be careful in discrimination. Traumatism comes next in frequency, although it does not necessarily follow that traumatic stricture is always the result of external violence. One of the principal causes is the injudicious or unskilful use of instruments. Great caution must be practised in the examination of each particular urethra as peculiarities exist that must receive attention. Bulbous instruments are indispensable for location, and sounds for ascertaining the form of stricture. Only gentle force should be exercised and not further than the triangular ligament; for this reason straight sounds are to be greatly preferred. Cocaine relieves much of the disturbance caused by operation, as well as that caused by exploration. A gleety discharge always indicates forming stricture. The urethrometer is a useful instrument, Otis' being the standard. A new instrument described by Stewart, of Pittsburg, registers automatically and is easily cleaned. The endoscope is now being rapidly brought into use. Strict antisepsis should be practised, although asepsis is practically unattainable. If there is good drainage little is to be feared. The instruments necessary for internal urethrotomy are the urethrotome and a probe-pointed curved bistoury. With the former, operations inaccessible to the bistoury are to be performed. After an operation, a sound or dilator, or both, should be passed daily for a week or ten days. Always carefully examine the urine in cases where an anesthetic is to be used, for possible nephritic disease. Gradual dilatation is valueless in organic stricture—in spasmodic it is usually all that is required. Meatotomy is often beneficial, but should not be performed indiscriminately. When impassable stricture, with retention or great difficulty in urinating exists, perform perineal section at once; also in cases of perineal abscess or fistula. I do not ordinarily approve of supra-pubic cystotomy and aspiration, perineal section has so many advantages, especially as regards mortality. If supra-pubic operation be imperative, perform perineal section at the same time, thus avoiding many of the disadvantages of the high operation. By perineal section we give the bladder and urethra rest, and thus facilitate subsequent procedure. My method of performing perineal section, where a guide cannot be used, is as follows: Introduce the index finger of the left hand into the rectum and carefully estimating the position of the prostatic urethra and neck, hook, so to speak, the last phalanx behind the prostate, carrying the urethra on the palmar surface of the finger. Having satisfied myself as to the course and direction of the urethra, I boldly plunge a small catling through the perineum (left lateral incision), carrying it through the urethra and prostate into the neck of the bladder. The operation is performed by two strokes of the knife, the first entering the bladder and the second (withdrawal) enlarging the incision to the desired size and shape. I believe this method preferable to dissecting the way in.

Dr. Geo. Chismore said that while in the main he was inclined to agree with Dr. Yemans, there were two or three points of difference in opinion. He did not think it always an easy matter to pass a bougie in spasmodic stricture, and mentioned a case of organic stricture of the pendulous urethra, in which he had dilated until a No. 14 sound passed easily. One day the patient seemed nervous and upon an attempt to pass the sound he found he could not pass even a No. 6. On asking the patient what he had been doing, he said that he had just met an acquaintance who told him of the suicide of an intimate friend. The patient returned the next day when the No. 14 sound was easily passed. Spasm at the site of the stricture was the cause of the resistance. Another point was, that a large number of eminent members of the profession differ in opinion as to the advisability of internal urethrotomy, many preferring gradual dilatation. He had seen a number of cases that complain of pain at ejaculation for years after urethrotomy, while many are so benefitted by gradual dilatation that we may say that a cure is effected, as they are able to readily pass a large bougie three or four years after having been treated.

Dr. G. F. Shiels said that one point he would like to have had the Doctor bring out was what would be the extent, in his opinion, to which the urethra should be dilated. He did not think that resilient stricture could be cured by gradual dilatation, but should be operated upon. He did not agree with Dr. Yemans that spasmodic stricture is confined to any particular portion of the urethra; there is less danger in cutting into the floor than the roof in resilient stricture of the penile portion. In relation to the operation of Dr. Yemans for impermeable stricture, he did not believe in boldly thrusting an instrument into the bladder through the perineum, as it seemed contradictory to the canons of surgery. He showed a case in which he had operated by careful dissection, and although the various strictures could not be defined, still the fear of any injury to the rectum, etc., was avoided.

Dr. F. Z. Bazan said he had operated both in the hypogastrium and the perineum; the character of the disease must determine which is the better.

Dr. G. W. Davis said he would emphasize the remarks of Dr. Shiels as to deliberation in work, and by the use of antiseptics.

Dr. F. B. Carpenter believed cutting the urethra upon the floor a mistake.

Dr. Yemans replied, that as to spasmodic stricture he based his assertions upon the opinion of several authorities as well as his own experience. The beauty of the operation was the rapidity with which it can be performed, as well as the absolute freedom from pockets, the perfect drainage and cleanliness.

Oöphorectomy for Diseased and Adherent Ovary and Tube.—**Dr. W. H. Mays** reported a case of oöphorectomy for diseased and adherent ovary and tube. The patient was a young married woman, multipara, who for two years had suffered from continuous pelvic pains. On examination the uterus was found to be enlarged, retroverted, and partially fixed. The right ovary was enlarged and displaced posteriorly. A thickened fallopian tube could also be felt on the right side, bending back into the Douglas pouch. As local treatment had failed to produce relief, an operation was undertaken. The fimbriæ of the right tube were found to be agglutinated to the posterior surface of the corpus uteri. After breaking up the adhesions the right ovary and tube were ligated and cut away. The ovary was about twice the normal size and showed signs of cystic degeneration. There was some catarrhal inflammation in the tube which was thickened and distended throughout. The left ovary was normal.

The fimbriæ of the left tube were turned back and adhered to the posterior surface of the uterus. These adhesions were broken up with the finger, and after cleansing the pelvic cavity, the wound was closed with silver sutures. The patient is now convalescent. The case will serve to illustrate the uselessness of the ordinary topical medication addressed to the uterine mucosa, when tubal complications are present, for after two years of persistent local treatment the patient was decidedly worse than at the start, The intrauterine cauterizations sometimes gave her excruciating pain for forty-eight hours afterwards. I am also doubtful whether the steady use of the hot water douche had been of any profit, and whether the prolonged persistent use of it had not aggravated the inflammatory changes by the frequent overheating and subsequent cooling of the pelvic organs. The tendency of the more recent pelvic pathology is to regard the uterine appendages rather than the uterus itself as the source and seat of the bulk of female complaints, and is is therefore possible that our methods of treatment may also undergo readjustment. Concerning the indications for oöphorectomy. When an enlargement of ovary or tube can be made out, and the woman is dragging out a wretched existence in consequence, our duty is plain. Where the diagnosis is not so assured, and no lesion is discoverable, there are certain conditions that will justify an abdominal section and removal of the ovaries, diseased or not. They are menstrual insanity, extreme menorrhagia, and intractable hemorrhage from the presence of fibroids. In all of these, and in every case of abdominal section, the operation should only be conducted with the strictest antiseptic precautions.

Dr. C. A. von Hoffman said that he thought if the case was treated for internal disease that the mistake was in not diagnosing the condition, as there was only one remedy—removal. Very frequently there is too much haste in making a diagnosis—at the present day we can determine so accurately what the disease is—and again we are often too hasty in recommending the removal of the ovaries.

Dr. Charlotte B. Brown said that we should be very guarded in operating; the sacrifice is too great to be acted upon hastily.

Dr. B. McMonagle said he thought Dr. Brown had struck the keynote when she advocated the saving of ovaries.

Dr. St. George Gray said that he agreed with the many that ovariotomy has been performed too often. He had seen cases of insanity that had been operated upon without a cure being produced.

Dr. G. W. Davis said that we should attempt to make a correct diagnosis. Many cases that have in former times been supposed to be uterine diseases were ovarian. Many eminent gynecologists agree in the difficulty of diagnosis in some cases. When other means failed he would advocate an exploratory incision for the purpose of diagnosis.

Dr. F. Z. Bazan said he thought it as absurd to discard the operation in all cases as it would be to recommend it. When the ovary is in a state of disintegration the only way to expect relief is its removal. Diagnosis has been greatly assisted by chloroform.

Dr. von Hoffman said that, with regard to the exploratory incision, it should not be made if it can be avoided. A few years ago it was resorted to very frequently, but had been so far discarded that it was but seldom done. The indiscriminate use of hot water is a mistake. The patient should be instructed as to the degree of heat and the amount to be used. There are very few cases of ovarian disease that cannot be diagnosed.

Dr. O. V. Thayer said that he had a hospital for the treatment of this class of cases for twenty years, and cures were frequent. The method was hydropathic, or water cure. Baths of all kinds were employed. General, local, from the wet sheet pack to a simple douche, and were taken from three to five times a day.

Craniectomy.—DR. DUDLEY TAIT reported a case of craniectomy. The patient, 38 years of age, had, in 1873, been run over and injured by a runaway horse. Among several other injuries there was a small scalp wound in the right temporal region, without any signs of fracture, which healed without suppuration at the end of one month. Seven months after the accident he began to complain of constant and violent cephalalgia, limited to the right side, which was relieved by a spontaneous discharge of pus through a fistulous opening at the superior external angle of the orbit. Since then he suffered from similar attacks, which were relieved in like manner, until June of 1890, when he suffered from anorexia, drowsiness and cephalalgia, which were more marked and constant than before. Examination showed a fistulous canal running backwards for an inch and a half, and the sensitive characteristic of an irregular, eroded osseous surface could be detected. An incision showed that the necrotic action had involved the whole thickness of the skull in the region of the anterior inferior angle of the parietal bone, the area of the perforation resembling in shape and size the aperture made by the ordinary trephine. Pus escaped through the perforation, the subjacent dura mater was vascular, thickened and separated from the bone. With the patient's consent craniectomy was undertaken, so as to permit a portion of the scalp to collapse and become adherent to the dura mater, thereby obliterating the abscess cavity, which measured 5x1¾ inches. Adhesion took place so rapidly that on the twelfth day three quarters of the cavity was already obliterated and the patient was discharged cured seventy-two days after the operation. During the healing process curetting of the surface of the dura mater was occasionally resorted to in order to stimulate the granulating tissues and direct the resulting cicatrix.

SPECIAL CORRESPONDENCE.

PARIS.

[FROM OUR OWN CORRESPONDENT.]

Koch's Treatment—Its Effects on Lupus.—The Deficiencies of the Paris Laboratories.—The Remedy Proposed.—Eyraud Murder Case.

Here, as elsewhere, the excitement concerning Koch's treatment of tuberculosis has calmed down, and a temporary verdict is rendered. It is a most interesting scientific discovery, but at present its therapeutic value is not yet demonstrated. The experiments with Koch's lymph have been made most carefully and conscientiously in about eight wards in different Paris hospitals, without counting the provinces. The general sum of evidence is the same as that obtained in Germany and England. In pulmonary tuberculosis, especially in an advanced stage, or when it presents the form of disseminated miliary tuberculosis, Koch's treatment appears to be more injurious than favorable. In tuberculosis of the osseous tissue and articulations the injections produce congestion and swelling; in children with these affections, after the third or fourth injection, the little sufferers in some instances lose a twentieth of their weight. This phenomenon was observed after the first injection, when the initial loss was ascertained; after the fourth the original weight was gradually recovered. The experiments on bony tubercular lesions have been most carefully made in Prof. Lannelougue's wards in the Trousseau Hospital for Children.

The most marked results of Koch's treatment have been observed in lupus cases. M. Cornil, in common with Koch, has observed congestion and swelling, and an exudation of serum from the affected parts. This serum examined revealed the presence of different kinds of bacilli, evidently furnished by the surrounding atmosphere and dust, and among these Koch's bacillus of tuberculosis. Whether this specific bacillus is alive or dead will be demonstrated when the results of inoculation are known. The exudation of serum in lupus cases suggests what takes place in pulmonary tuberculosis and in organs without any exterior communication. If the bacilli retain their vitality this effusion is evidently dangerous, as infection is thereby disseminated. If the bacilli be dead this effusion is salutary. Later on the question will be solved. As a means of diagnosis Koch's lymph has proved effectual, still in some cases the reaction has not taken place, although the patients were decidedly tuberculous. All the eminent medical men here say that six months, and probably a year, must elapse before anything definite can be known regarding the new treatment as a therapeutic agent. MM. Cornil and Lannelougue gave every Sunday an interesting clinical lecture on the result of the inoculations. The changes were thus made known to the medical world of doctors and students. These lectures will be resumed a month hence.

Koch's discovery may possibly act as a stimulant and means of diagnosis of the shortcomings of our laboratory organization. Voices are heard exclaiming, "It would be difficult to do such work in our laboratories." The reasons are clearly catalogued and the remedies well defined. There is ample material in the form of brain work of a high order, but the present system does not give full play to the scientific power France possesses, centred in her scientists. Either laboratory posts are held by distinguished scientists who hold more than one appointment, neither of which is lucrative, or a number of small laboratories are attached to hospitals and a medical man is installed as *chef*. As a general rule he is not especially competent to fill such a post, although he may be an excellent clinician. Younger men with a decided taste and aptitude for science come to the rescue and work in his laboratory. Though competent, they are not sufficiently competent, and moreover as science as a career brings but a meagre supply of grist to the mill, these young men rather coquet with science than follow it up seriously. Their serious attention is given to medicine. Still pathological specimens are examined and experiments are made in accordance with the views of the *chef*, which has certainly one result—that of what is called "making a *chef*," namely, obtaining a protector at future examinations. Both systems are in every way bad, and fatal to the progress of science. Distinguished scientists who know what they are about, fritter away their forces and physical strength by working in our laboratories. The smaller laboratories, headed by medical men and manned by an intelligent but inefficient corps, make attempts which rarely or never lead to satisfactory results. In a word, this plethora of miniature laboratories serve as scientific toys to would-be scientists, without contributing to the total gain of science. The remedy required and proposed in scientific circles, and which, let us hope, will be developed beyond them and obtain the "hall mark," or, in other words, ministerial ratification, is the creation of a limited number of large laboratories in which the numerous able men now working under difficulties which are almost sufficient to strangle a Koch at birth will find a habitation, scientific appliances and a staff of pupils in condition to help them. At present there are very few French laboratories, if indeed any, possessing one of these desiderata. Ministerial poverty is pleaded when demands are made for appropriations necessary to carry on scientific research, for which the slender laboratory budget does not provide the means. In a sense ministerial poverty may be a valid plea, but an absence of ministerial common sense is the cause of the poverty. A considerable sum is yearly spent on the different laboratories, but so ill spent, owing to the faulty organization, that those who want go empty handed, and those who do not want obtain it. I could mention laboratories which are supplied with costly instruments and the workers in these laboratories do not know how to make use of them. These instruments, which would be valued by others, are neglected, put out of order, and represent so much money thrown away, which in its expenditure has only given satisfaction to the instrument maker. This mismanagement is deplorable and deplored by all *au courant* with the question, whatever may be their nationality. The French intellect is especially capable of doing good scientific work, and this question of revising the laboratory organization in France touches a wider and more vital question than that of French *amour propore*—that of the advancement of science, which is one of universal interest and importance. The discoveries made by science are free from a conservative taint; they benefit all classes and all races.

The sensational murder trial—the "procès Gouffé"—with which your readers are probably acquainted, has caused additional sensation by the medical evidence. Gouffé was a Sherift's officer strangled by Eyraud and Gabrielle Bompard, or certainly with the connivance of the latter. The question whether Gabrielle Bompard is morally responsible, also whether she was not hypnotized by Eyraud and the crime suggested then by Eyraud, was raised at the trial by her counsel. Professors Brouardel, Mottet and Ballet rejected this hypothesis and believed Bompard to be responsible. M. Liégeois, professor of jurisprudence at Nancy, admitted the possibility of the supposition. Prof. Voisin, a distinguished alienist, attached to the Salpétrière Hospital, examined Gabrielle Bompard in prison, being the prison doctor. At the trial he declined to give evidence, stating that "professional secrecy" prevented him. Gabrielle Bompard's counsel stated in court that had Prof. Voisin given evidence he would have told them that he hypnotized G. Bompard, who during hypnotism stated that Eyraud suggested the crime to her; but when she was about to strangle Gouffé with a *cordelière* she wore; an attack of hysterics prevented her. Eyraud, who was hidden behind a curtain, rushed forward and strangled Gouffé. When not hypnotized Gabrielle cannot recall these details. In giving you these data I only sum up what is stated by others. How far they are reliable neither I nor any one except those immediately concerned can decide. Eyraud has been sentenced to death, and Gabrielle to twelve years' imprisonment. She had surrendered herself. As she stated in court, she took a cab and went to the Prefect of Police. Eyraud, after some difficulty, was arrested in Havana.

PARIS, January 5, 1891.

GERMANY.

[FROM OUR OWN CORRESPONDENT.]

Koch's Remedy for Tuberculosis.—Entertainment to Professor Kuster.—Medical Night Service in Berlin.—A New Obstetrical Model.

Robert Koch's wonderful discovery is naturally the subject which at present engrosses all our thoughts and conversation, and although I cannot in the least expect to give anything approaching a complete survey of the question, it is simply impossible to speak of anything else before one has disburdened his mind of, at least, a part of his admiration for this "epoch-making" event. As you will have learned ere this, Koch has prepared a substance which exercises a remarkable influence on tuberculous tissue and, in fact, acts as a specific remedy for tuberculosis when inocculated subcutaneously on persons suffering from lupus, scrofula and consumption, or the allied diseases. It is a peculiar brownish fluid, the composition of which is only known to two or three persons besides Koch himself,* but it has already been quite extensively tested at a number of the universities. The effects are evidently very powerful, and Koch must have passed a very *mauvaise quart d'heure* when he gave himself an injection and found his temperature running up to 103° F., and all kinds of pains and other disagreeable sensations pervading his whole system. At this moment, Berlin literally swarms with physicians of all nationalities, all intensely eager to observe the action of this remarkable elixir, and to procure some of it for the benefit of their patients. Let us hope that this ardor will not in the end be subjected to a measure of disappointment. It is, however, certain that many sufferers who are at this moment buoyant with the hope of a speedy recovery, will be doomed to find their expectations blasted. Before the correct dosage and the conditions of appropriate application for each individual case can be sufficiently studied, many a failure will inevitably be encountered. Notwithstanding, however, that positive proofs are still to be furnished regarding the efficacy of the new fluid to induce a complete and permanent cure of consumption and its congeners, we are none the less perfectly convinced that these diseases are now about to be stamped out from the face of the civilized world, just as small-pox and leprosy have in Europe become practically things of the past. The diagnostic value of the method is alone adequate, by enabling us to discover tuberculosis even in its occult forms, and to afford us the means of effectually checking the further spread of the trouble. From a practical point of view, it is satisfactory to learn that the precious liquid, although it takes six weeks to prepare, is, as regards materials, so inexpensive that injections can be made at the cost of two cents each. The pecuniary advantage to the commonwealth derived from the saving of life through this invention would alone be worth a considerable recompense, and the grant of a million marks, which Koch has declined, would not have been too great a reward. As it is, he is content with the fame inherent to his discovery in itself without any desire for material advantages; but, of course, honors and acknowledgments have not been wanting. The Emperor bestowed the Grand Cross of the Red Eagle, one of the greatest distinctions of its kind, upon him, and the city of Berlin has presented him with its honorary freedom. In the House of Deputies he was eulogized by the Minister of State, von Gossler, who said: "When I shall retire from public life there will be hardly anything that can give me so much satisfaction as the remembrance that I had the privilege of smoothing the way for a man like Robert Koch." Thus even the politician in this case, with most amiable grace has given place to the man of science, and acknowledges the possibility of medical research proving of greater value for the promotion of the political importance and welfare of the nation than even the achievements of the astutest diplomacy. Extensive provision is being made, in order to afford as many patients as possible, the benefit of the discovery A hospital for 128 beds will very shortly be completed; this will be specially for the treatment of impecunious consumptives, a request for $125,000 having already been presented to the Landtag for this purpose. Besides this, a generous donor, whose name is still a secret, but who is generally believed to be Herr von Bleichroder, one of the first financiers of Berlin, has given double this sum for a similar purpose. The number of cases under treatment at the various hospitals of Berlin, already large, is daily increasing, and the work is being carried on everywhere with ardor and circumspection. Truly, when we consider the wonderful advances made in medical science of late, there is no devotee of the healing art but will say of the present age as Ulrich von Hutten said of his own: "It is a pleasure to live in such a time."

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*It can be obtained from Dr. A. Libbertz, Berlin, N. W. Lüneburger str. 28, II.,

There was a very successful and agreeable entertainment in honor of Professor Ernst Kuster the other day, as a parting compliment on his leaving Berlin for Marburg. Kuster was surgeon-in-chief to the Kaiserin Augusta Hospital, and is universally esteemed and liked. He is a very thorough and original worker, and Marburg is to be warmly congratulated on her acquisition. I was particularly impressed with his manner of operating for empyema, as described before the Medical Society of Berlin some time ago. The principle of his mode of procedure, briefly stated, consists in making an opening for the pus at its lowest level. For this purpose he makes two incisions, one in the axillary region in the fourth or fifth intercostal space, just large enough to admit a moderate sized drainage tube; through this opening he introduces a long probe, which he pushes as far backwards and downwards in the pleural cavity as it will go without danger of damaging the tissues. When he has thus discovered the lowest limit of the cavity he cuts down on the knob of the probe, resects one or two ribs, puts in drainage tubes and thoroughly irrigates and cleanses the pleural walls with a mild antiseptic. The results which he has published are very encouraging. At Marburg, where the shade of that otherwise venerable but not antiseptic veteran, Roser, still seems to hover, Kuster expects to find an extensive field for work. His first task will be to superintend the erection of the new surgical hospital, which is to be constructed on the newest and most approved methods of modern surgery. In such things government is as a rule very liberal, so the result will probably be highly satisfactory to all parties.

A pretty lively discussion has lately arisen on the subject of medical night service in Berlin, in consequence of two children having died asphyxiated during a fire, although they might possibly have recovered had medical aid been at hand in time. In spite of the house where the fire took place, being situated in the Friedrich Strasse, one of the most central streets of the city, owing to some mischance, no medical man was to be found for a considerable length of time. It is evident that with doctors by the score living in every street of these parts of the town, the difficulty was merely how to find them in the darkness of night. A very sensible plan has been proposed to remedy this defect, viz: That doctors shall provide their houses with a little red lamp, which, when lit at night, would at once inform the seeker that one is at home; when extinguished, patients would know that the doctor was not there. In Vienna, I hear, the plan has already been tried and has given much satisfaction. In Germany, it is to be feared this innovation will meet with some opposition, on the grounds that it savors a little of advertising one's presence to the public. To my mind, such an objection is quite indefensible modesty, to call it by no harder name, and to the argument, which has also been put forward that we doctors are hard worked enough and would be glad to find a means of escaping from being rung up at night, I would reply that no better method could be devised for this very purpose. For, if you have been called out a few nights running and are in want of a good night's rest, all you have to do is to "douse the glim" and your abode will unconsciously be passed by in the darkness, as the troublesome visitors will insensibly be attracted to the nearest red light in the neighborhood.

Of recent inventions, one that is most likely to come into universal favor, is an improved obstetrical model, constructed by Mr. Klautsch, of Halle, a vast improvement on the clumsy and inaccurate wood and leather things now in use. In Germany, at least, obstetrical operations are practised on quite rough models, which are widely different to the real female organs. Now, Klautsch conceived the very sensible idea of making a model, which, at least, as nearly as possible approaches nature. It consists of an exact imitation of a normal female pelvis in papier mache; attached to this we have as a representation of the uterus at full term, an elongated bag of flexible rubber netting, the lower end of which, representing the os tincæ at the end of the second stage of labor, is open, so as to admit of the puppet imitation of the fetus passing through it. The upper end, the fundus uteri, can be opened, in order to place the child in the position desired, and can then be closed with a clasp. By suitable pressure, an imitation even of the pains can be produced, and the fetus is propelled quite in the natural manner through the pelvis until it is born. The puppets, which are very well made and also far superior to those hitherto in use, are supplied with a funis and placenta, so that really nothing is wanting. The pelvis being supported by a jointed iron arm, it is possible to allow a delivery in the dorsal, lateral, or in any position chosen. For examining purposes, a light screen is neatly fitted on to the pelvis, so that the candidate is unable to see anything of the interior, while the examiner, standing behind the phantom, is able to overlook the whole condition of things and all the maneuvres of the examinee, most completely. I am sure, all who have tried to learn or to teach obstetrical operations with the old models, will be simply delighted with this improvement. Professor Fritsch, of Breslau, in fact, expressed his opinion to the effect that no medical man practising midwifery could conscientiously be without one. The mauufacture and sale of these models, which have been duly patented, is carried on by Messing, of Berlin, Dorotheen Strasse 38–39, who supplies them at a moderate price.

December 26, 1890.

REVIEWS AND NOTICES.

THE PHYSICIAN'S ALL-REQUISITE TIME AND LABOR-SAVING ACCOUNT BOOK. Designed by William A. Seibert, M. D. Philadelphia: F. A. Davis. Price, No. 1 style, 300 p., 900 accts., $5.00.

Physicians are proverbially bad collectors and worse bookkeepers. The recognition of this fact has impelled the medical publisher from time to time to provide a system whereby the labor of keeping accounts would be reduced to a minimum, the effort being to make one original entry sufficient for an account. This would make one book sufficient, and obviate posting while the one book must at the same time be producible in court. "The Physician's All-requisite Time and Labor-saving Account Book" is the latest effort in this direction. The book, 10x12 inches in size, contains three accounts to a page, each account being good for 12 months. In one line can be kept the name of patient, memorandum of services, visit or office consultation, amount due, date and memorandum of payment with amount. By the simple device of placing visits and office consultations in different spaces under the day of the month, no cipher is required, unusual items being recorded at the commencement of the line. The book is numbered throughout and accompanied by an index. The latter, however, does not seem large enough for the work to be performed. Practical experience must demonstrate the advantages of any of these systems, at the same time the book before us is certainly simple and free from the details that, as a rule, complicate these efforts at simplicity.

OINTMENTS AND OLEATES, ESPECIALLY IN DISEASES OF THE SKIN. By John V. Shoemaker, M. A., M. D., Professor of Materia Medica, Pharmacology, Therapeutics and Clinical Medicine; and Clinical Professor of Diseases of the Skin in the Medico-Chirurgical College of Philadelphia; Physician to the Medico-Chirurgical Hospital, etc. Second edition, revised and enlarged. Part 6, Physicians' and Students' Ready Reference Series. Philadelphia and London: F. A. Davis. Price $1.50.

This volume, consisting of two parts, treating respectively of ointments and oleates, is a thorough resume of the subjects mentioned. In Part I are found not only the officinal ointments, but many useful ointments not yet so recognized are fully described. The methods of France, Germany, Austria, Italy, Spain and her colonies have all been canvassed, and the work produced now in its second edition is a complete review of the subject. The author has made a special study of oleates; in fact, it was largely through his efforts they were introduced to the profession, and in Part II we find again a thorough exposition of the subject. To those seeking detailed knowledge on these subjects this book can be confidently recommended.

THE LATIN GRAMMAR OF PHARMACY AND MEDICINE. By D. H. Robinson, Ph. D., Professor of Latin Language and Literature, University of Kansas, with an introduction by L. E. Sayre, Ph. G., Professor of Pharmacy in and Dean of Department of Pharmacy, University of Kansas. Philadelphia: P. Blakiston, Son & Co., pp. vii—264.

Professor Robinson's book marks a new departure in the conservation of energy. "Small Latin," indeed, falls to the lot of the average physician and pharmacist, too "small" by far for the purposes of the scholar, yet sufficient, if Prof. Robinson's method be pursued, to meet the requirements of the practical physician and apothecary. Careful examination enables us heartily to recommend this grammar to the student of pharmacy and of medicine, even if he already have a familiar acquaintance with the language of Cæsar. If he have not such acquaintance, or the time and opportunity to acquire it, he will find this little work well nigh indispensable.

REPORTS, ANALYSES AND NEW INVENTIONS

The Atmospheric Tractor.

This novel and ingenious contrivance is the invention of Dr. P. McCahey, of Philadelphia. It is to be used as a substitute for the obstetric forceps in many cases, and in others, where the forceps would not be employed, merely to facilitate labor. It consists of a shallow rubber cup attached to a solid rubber stem ending in a button-like enlargement. The tractor is to be applied to the child's head, sufficient pressure being used at first to expel the air and thus make it adhere by atmospheric pressure. It may be employed at any stage after "the os is sufficiently dilated or dilatable." The amount of traction that can be exerted by it is very considerable. There is nothing to get out of order, and being made of smooth rubber, and in one piece, it can be perfectly disinfected. It is an interesting fact that while the "atmospheric tractor" is an independent invention, a more complicated apparatus on the same principle had been used by Prof. J. Y. Simpson as far back as 1848. The results "equalled his best expectations," but the instrument was abandoned on account of its complexity.

MEDICAL NEWS.

LICENTIATES OF THE BOARD OF EXAMINERS.

At the regular meeting of the Board of Examiners, held in San Francisco December 22, 1890, the following named physicians were granted certificates to practise medicine and surgery in this State:

Abraham B. Arnold, San Francisco; Washington Univ. School of Med., Md., March 1,'48.
J. M. M. C. Beukers, Livermore; Univ. of Leiden, Holland, Nov. 14,'90.
Frederick Taylor Bond, Vallejo; Med. Dept. Univ, of California, Nov. 20,'90.
John C. Bynum, San Luis Obispo; Coll. Phys. and Surg., St. Joseph, Mo., March 2,'80
Nathan Park Dennis, San Francisco; Med. Dept. Univ. of California, Nov. 16,'88.
George B. Eitel, San Francisco; Minnesota Hosp. Coll., Minn., March 16,'88.
Henry Martyn Field, Pasadena; Coll. Phys. and Surg., N. Y., March —,'62.

Philip S. Goodman, West Point: Missouri Med. Coll., Mo., March 4,'90.
Wm. James Hawkins, San Francisco; Med. Dept. Univ. of California, Nov. 20,'90.
Edward Robert Holmes, San Francisco; Med. Dept. Univ. of California, Nov. 14,'89.
George Rucian Hubbell; Cooper Med. Coll, Cal., Nov. 13,'90.
Melvin Byron Huff, Riverside; Med. Dept. Univ. of Buffalo, N. Y., Feb. 24,'85.
Henry Behrend Albert Kugeler, San Francisco; Med. Dept. Univ. of California, Nov. 20,'90.
Clinton Henry Lubbock (lieu certificate), Alameda; Coll. of Med. Univ. of the State of Missouri, Columbia, June 3,'80; Med. Dept. Univ. of the city of New York, March 8,'81.
James Milton McComas, Los Angeles; Hosp. Coll. of Med., Louisville, Ky., Feb. 26,'75; Kentucky School of Med., June 1,'80.
Harry Lincoln Parish, Golden Gate; Cooper Med. Coll., Nov. 13,'90,
Kaspar Pischl, San Francisco; Univ. of Innesbruck, Austria, Nov. 13,'86.
Prescott L. Rice, Los Angeles; St. Louis Med. Coll., Mo., March 4,'64.
Charlotte B. Spring, San Francisco; Med. Dept. Univ. of California, Nov. 20,'90.
Marion Thrasher, Med. Dept. Univ. of California, Nov. 20,'90.
Henry Ussher, Pomono, McGill Univ., Montreal, Can., May 3,'61.

CHAS. E. BLAKE, Secretary.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department of the U. S. Army (Division of the Pacific), from December 17, 1890, to January 17, 1891.

Leave of absence for fourteen days, to take effect on or about December 20, 1890, is granted Captain William Stephenson, Assistant Surgeon. Par. 18, S. O. 291, A. G. O., Dec. 13, 1890.

The extension of leave of absence granted Major Stevens G. Cowdrey, Surgeon, in S. O. 263, Nov. 20, 1890, from this office, is further extended ten days on account of sickness. Par. 4, S. O. 293, A. G. O., Dec. 16, 1890.

Paragraph 17 of Special Orders No. 287, Dec. 9, 1890, from this office, relating to Captain Marcus E. Taylor, Assistant Surgeon, is so amended as to direct him to report to the commanding officer Vancouver Barracks, Washington, for duty as Post Surgeon, relieving Colonel Bernard D. Irwin, Surgeon, of that duty. Captain Rudolph G. Ebert, Assistant Surgeon, will be relieved from duty at Vancouver Barracks, Washington, upon the arrival of Captain Taylor, and will then proceed to Fort Huachuca, A. T., and report in person to the commanding officer of that post for duty. S. O. 294, A. G. O., Dec. 17, 1890.

First Lieutenant Thomas U. Raymond, Assistant Surgeon, having been ordered to temporary duty at Vancouver Barracks, Washington, by the Commanding General, Department of Columbia, is assigned to duty at that post and relieved from further duty at Fort Sherman, Idaho. S. O. ——, A. G. O., Dec. 17, 1890.

Captain William J. Wakeman, Assistant Surgeon, is relieved from the further operation of par. 13, S. O. 254, A. G. O., Oct. 30, 1890, and telegraphic instructions of the 16th inst. from this office, transferring him from Fort Bidwell, Cal., to Fort Huachuca, A. T., and he will return from Reno, Nev., to Fort Bidwell for further duty at the latter post. Par. 3, S. O. 300, A. G. O., Dec. 24, 1890.

The extension of leave of absence, on account of sickness, granted Major Stevens G. Cowdrey, Surgeon, in S. O. 293, Dec. 16, 1890, from this office, is still further extended one month on account of sickness. Par. 8, S. O. 302, A. G. O., Dec. 27, 1890.

Captain Henry S. Kilbourne, Assistant Surgeon, will proceed without delay to Pine Ridge Agency, S. D., and report in person to the Commanding General, Department of the Platte, for duty in the field. Par. 9, S. O. 304, A. G. O., Dec. 30, 1890.

Leave of absence for one month, with permission to apply for an extension of one month, to take effect after the return to Fort Marcy of Surgeon Stevens G. Cowdrey, is granted Acting Assistant Surgeon A. P. Frick. Par. 2, S. O. 4, Dept. Ariz., Jan. 12, 1891.

PROMOTIONS

To be Assistant Surgeon, with the rank of Captain, after five years' service, in accordance with the act of June 23, 1874, Assistant Surgeon Leonard Wood, January 5, 1891. A. G. O., Washington, D. C., Jan. 12, 1891.

ITEMS.

Dr. Frederick H. Stahl has returned from Europe and has resumed practice at 501 Geary street, San Francisco.

Dr. R. E. Bunker has removed his office from 637 Kearny street to 46 O'Farrell street, San Francisco.

Dr. E. E. Kelly has resumed practice at 1247 Market street, corner of Ninth, San Francisco.

F. A. Davis, the well known publisher of Philadelphia, has opened a general agency for the Pacific coast at 935½ Howard street, San Francisco, with Dr. J. M. Littler as his representative. A full stock of books will be kept on hand, and the publications of the house will be furnished without delay.